* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	May 10	PROUSDDR now available on STN
NEWS 4	May 19	PROUSDDR: One FREE connect hour, per account, in both May and June 2004
NEWS 5	May 12	EXTEND option available in structure searching
NEWS 6	May 12	Polymer links for the POLYLINK command completed in REGISTRY
NEWS 7	May 17	FRFULL now available on STN
NEWS 8	May 27	New UPM (Update Code Maximum) field for more efficient patent SDIs in CAplus
NEWS 9	May 27	CAplus super roles and document types searchable in REGISTRY
NEWS 10	May 27	Explore APOLLIT with free connect time in June 2004
NEWS 11	Jun 22	STN Patent Forums to be held July 19-22, 2004
NEWS 12	Jun 28	Additional enzyme-catalyzed reactions added to CASREACT
NEWS 13	Jun 28	ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R)

NEWS EXPRESS	MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

*MARPATPREV - Preview File for the CAS Patent Markush File

* The files listed above are temporarily unavailable.

FILE 'HOME' ENTERED AT 11:33:48 ON 06 JUL 2004

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'HCAPLUS' ENTERED AT 11:33:56 ON 06 JUL 2004
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FILE COVERS 1907 - 6 Jul 2004 VOL 141 ISS 2
FILE LAST UPDATED: 5 Jul 2004 (20040705/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s 127:217524/dn
L1 1 127:217524/DN

=> sel rn
E1 THROUGH E1 ASSIGNED

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DELETE ALL E# DEFINITIONS? (Y)/N:y
ALL E# DEFINITIONS DELETED

=> s 126:144017/dn
L2 1 126:144017/DN

=> sel rn
E1 THROUGH E10 ASSIGNED

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	5.12	5.33

FILE 'REGISTRY' ENTERED AT 11:35:12 ON 06 JUL 2004
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STRUCTURE FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8
DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> s e1-e10
1 166820-04-8/BI

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                (167173-86-6/RN)
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                186528-21-2/BI OR 186528-22-3/BI OR 186528-23-4/BI)

=> d scan

L3    10 ANSWERS   REGISTRY  COPYRIGHT 2004 ACS on STN
IN    2(5H)-Furanone, 5-methyl-3-(phenylmethyl)-, (5S)- (9CI)
MF    C12 H12 O2

Absolute stereochemistry.
```


```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1)9

L3    10 ANSWERS   REGISTRY  COPYRIGHT 2004 ACS on STN
IN    Butanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-
      pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-
      7-yl ester (9CI)
MF    C27 H32 N2 O9

Absolute stereochemistry.
Currently available stereo shown.
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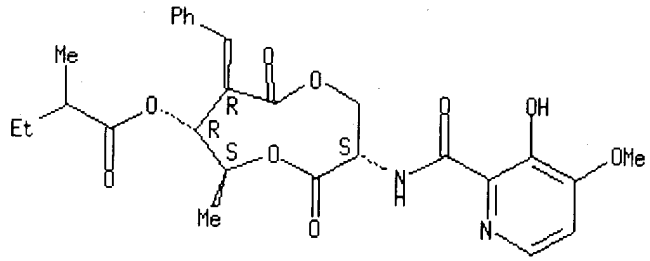
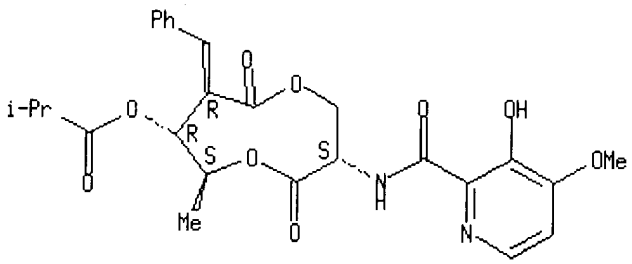


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C26 H30 N2 O9

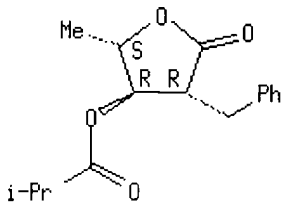
Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Arabinonic acid, 2,5-dideoxy-2-(phenylmethyl)-, γ-lactone, 3-(2-methylpropanoate) (9CI)
MF C16 H20 O4

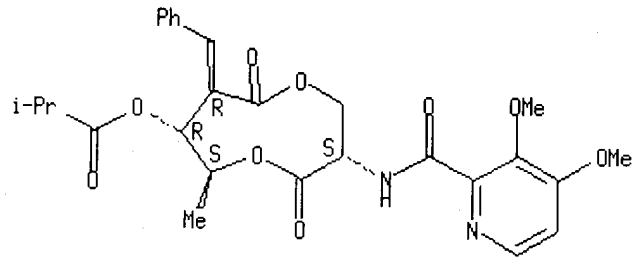
Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, 3-[[(3,4-dimethoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, [3S-(3R*,6R*,7S*,8S*)]- (9CI)
MF C27 H32 N2 O9

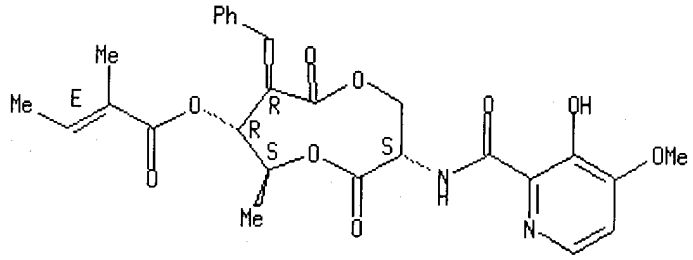
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 2-Butenoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, (2E)- (9CI)
MF C27 H30 N2 O9

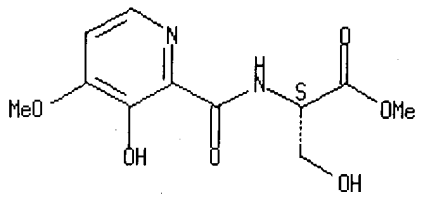
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Serine, N-[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]-, methyl ester (9CI)
MF C11 H14 N2 O6

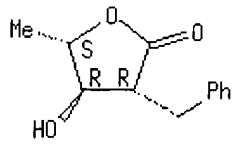
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Arabinonic acid, 2,5-dideoxy-2-(phenylmethyl)-, γ-lactone (9CI)
MF C12 H14 O3

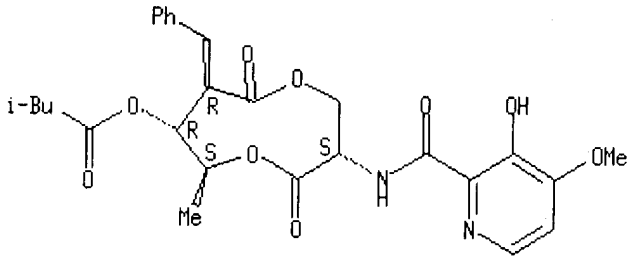
Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Butanoic acid, 3-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C27 H32 N2 O9

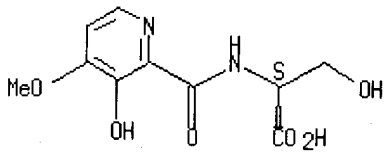
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Serine, N-[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]- (9CI)
MF C10 H12 N2 O6

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.36	8.69

FILE 'HCAPLUS' ENTERED AT 11:40:06 ON 06 JUL 2004
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FILE COVERS 1907 - 6 Jul 2004 VOL 141 ISS 2
FILE LAST UPDATED: 5 Jul 2004 (20040705/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s 125:109869/dn
L4 1 125:109869/DN

=> sel rn
E11 THROUGH E14 ASSIGNED

=> delete select
DELETE ALL E# DEFINITIONS? (Y)/N:y
ALL E# DEFINITIONS DELETED

=> sel rn
E1 THROUGH E4 ASSIGNED

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.64	11.33

FILE 'REGISTRY' ENTERED AT 11:40:27 ON 06 JUL 2004
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STRUCTURE FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8
DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

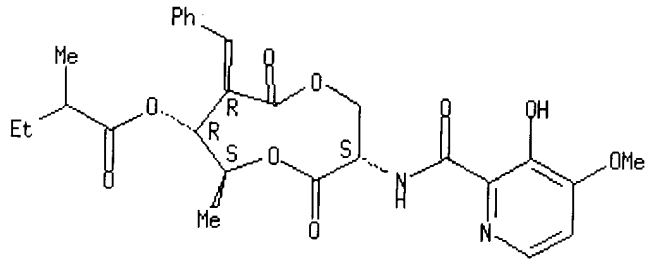
=> s e1-e4
1 167173-85-5/BI

(167173-85-5/RN)
1 167173-86-6/BI
(167173-86-6/RN)
1 167173-87-7/BI
(167173-87-7/RN)
1 167173-88-8/BI
(167173-88-8/RN)
L5 4 (167173-85-5/BI OR 167173-86-6/BI OR 167173-87-7/BI OR 167173-88-8/BI)

=> d scan

L5 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Butanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C27 H32 N2 O9

Absolute stereochemistry.
Currently available stereo shown.

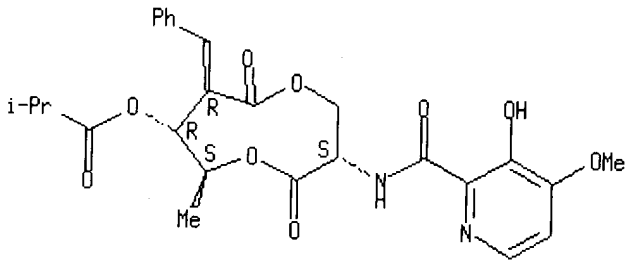


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1)3

L5 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C26 H30 N2 O9

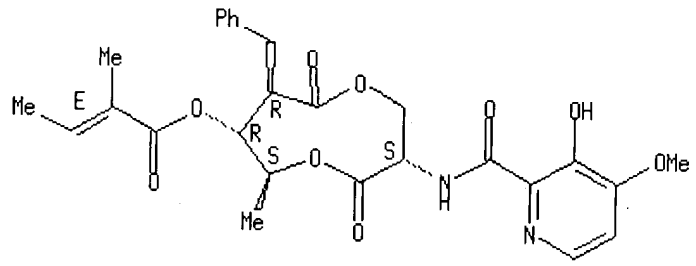
Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 2-Butenoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, (2E)- (9CI)
MF C27 H30 N2 O9

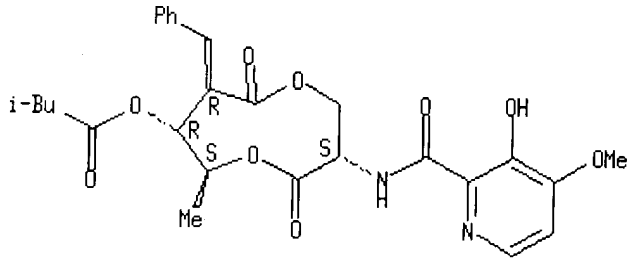
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Butanoic acid, 3-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C27 H32 N2 O9

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=>

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FILE COVERS 1907 - 6 Jul 2004 VOL 141 ISS 2
FILE LAST UPDATED: 5 Jul 2004 (20040705/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L1 1 127:217524/DN

=> sel rn
E1 THROUGH E1 ASSIGNED

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ALL E# DEFINITIONS DELETED

=> s 126:144017/dn
L2 1 126:144017/DN

=> sel rn
E1 THROUGH E10 ASSIGNED

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	5.12	5.33

FILE 'REGISTRY' ENTERED AT 11:35:12 ON 06 JUL 2004
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8
DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> s e1-e10
1 166820-04-8/BI

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             1 186528-23-4/BI
                (186528-23-4/RN)
L3          10 (166820-04-8/BI OR 166820-06-0/BI OR 167173-85-5/BI OR 167173-86
               -6/BI OR 167173-87-7/BI OR 167173-88-8/BI OR 186528-19-8/BI OR
               186528-21-2/BI OR 186528-22-3/BI OR 186528-23-4/BI)

=> d scan

L3    10 ANSWERS   REGISTRY  COPYRIGHT 2004 ACS on STN
IN    2(5H)-Furanone, 5-methyl-3-(phenylmethyl)-, (5S)- (9CI)
MF    C12 H12 O2

Absolute stereochemistry.
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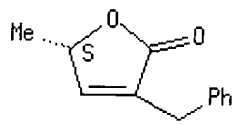


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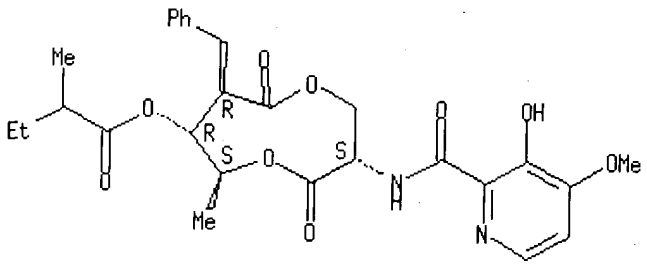
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) 9

L3    10 ANSWERS   REGISTRY  COPYRIGHT 2004 ACS on STN
IN    Butanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-
      pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-
      7-yl ester (9CI)
MF    C27 H32 N2 O9

Absolute stereochemistry.
Currently available stereo shown.
```



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
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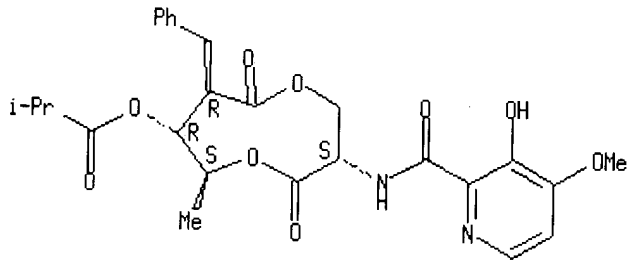
MF C26 H30 N2 O9

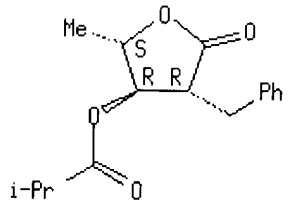
Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Arabinonic acid, 2,5-dideoxy-2-(phenylmethyl)-, γ-lactone, 3-(2-methylpropanoate) (9CI)
MF C16 H20 O4

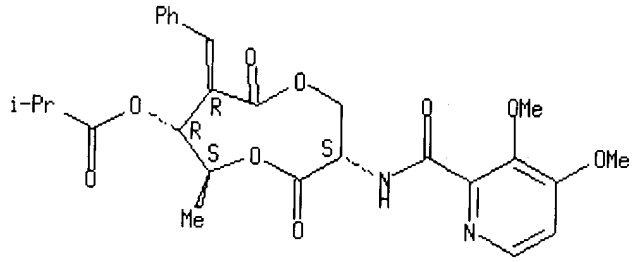
Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, 3-[[(3,4-dimethoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, [3S-(3R*,6R*,7S*,8S*)]- (9CI)
MF C27 H32 N2 O9

Absolute stereochemistry.

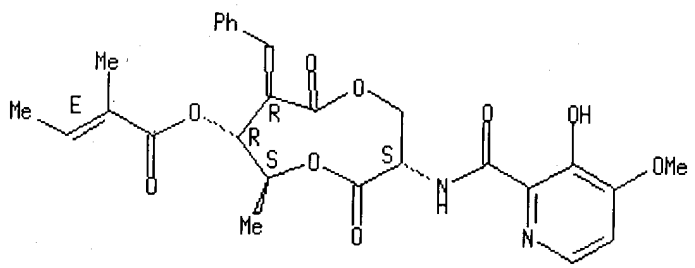


102(b)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 2-Butenoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, (2E)- (9CI)
MF C27 H30 N2 O9

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.

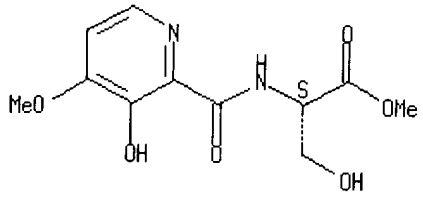


102(b)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Serine, N-[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]-, methyl ester (9CI)
MF C11 H14 N2 O6

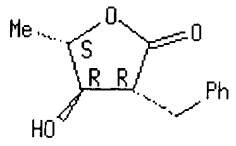
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Arabinonic acid, 2,5-dideoxy-2-(phenylmethyl)-, γ-lactone (9CI)
MF C12 H14 O3

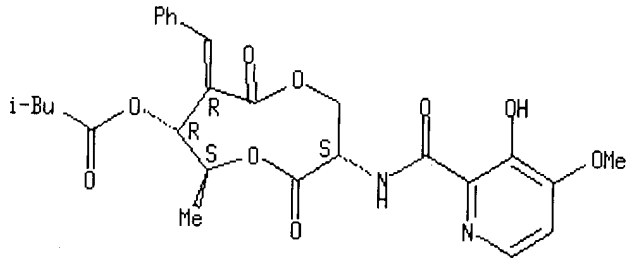
Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Butanoic acid, 3-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C27 H32 N2 O9

Absolute stereochemistry.

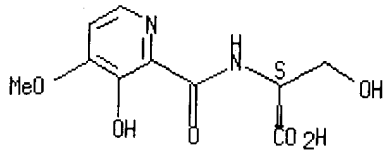


102 (b)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Serine, N-[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]- (9CI)
MF C10 H12 N2 O6

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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NEWS  4  May 19      PROUSDDR: One FREE connect hour, per account, in both May
                     and June 2004
NEWS  5  May 12      EXTEND option available in structure searching
NEWS  6  May 12      Polymer links for the POLYLINK command completed in REGISTRY
NEWS  7  May 17      FRFULL now available on STN
NEWS  8  May 27      New UPM (Update Code Maximum) field for more efficient patent
                     SDIs in CAplus
NEWS  9  May 27      CAplus super roles and document types searchable in REGISTRY
NEWS 10  May 27      Explore APOLLIT with free connect time in June 2004
NEWS 11  Jun 22      STN Patent Forums to be held July 19-22, 2004
NEWS 12  Jun 28      Additional enzyme-catalyzed reactions added to CASREACT
NEWS 13  Jun 28      ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG,
                     and WATER from CSA now available on STN(R)

NEWS EXPRESS  MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
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*MARPATPREV    - Preview File for the CAS Patent Markush File

  * The files listed above are temporarily unavailable.

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=> file reg
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'REGISTRY' ENTERED AT 11:26:38 ON 06 JUL 2004
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STRUCTURE FILE UPDATES:    5 JUL 2004  HIGHEST RN 704870-92-8
```

DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.94	3.15

FILE 'HCAPLUS' ENTERED AT 11:30:47 ON 06 JUL 2004
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FILE COVERS 1907 - 6 Jul 2004 VOL 141 ISS 2
FILE LAST UPDATED: 5 Jul 2004 (20040705/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 128:163891/dn
L1 1 128:163891/DN

=> sel rn
E1 THROUGH E3 ASSIGNED

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.56	5.71

FILE 'REGISTRY' ENTERED AT 11:31:00 ON 06 JUL 2004
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DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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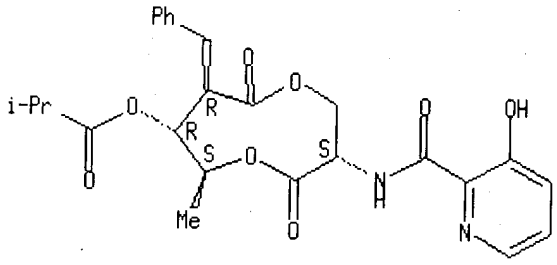
             1 194931-82-3/BI
               (194931-82-3/RN)
             1 56-65-5/BI
               (56-65-5/RN)
L2           3 (167173-85-5/BI OR 194931-82-3/BI OR 56-65-5/BI)

=> d scan

L2   3 ANSWERS   REGISTRY  COPYRIGHT 2004 ACS on STN
IN   Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-2-
     pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-
     7-yl ester (9CI)
MF   C25 H28 N2 O8

Absolute stereochemistry.  Rotation (+).
```



102(b)

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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1)2

L2   3 ANSWERS   REGISTRY  COPYRIGHT 2004 ACS on STN
IN   Adenosine 5'-(tetrahydrogen triphosphate) (8CI, 9CI)
MF   C10 H16 N5 O13 P3
CI   COM

Absolute stereochemistry.
```
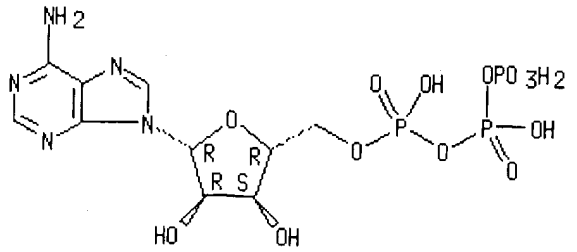
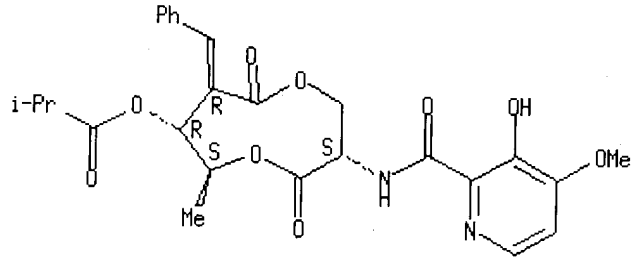



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 3 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C26 H30 N2 O9

Absolute stereochemistry. Rotation (+).



1026)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

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=> s 131:214101/dn
L9            1 131:214101/DN
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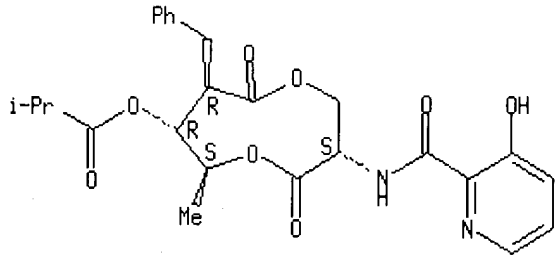
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 24 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C25 H28 N2 O8

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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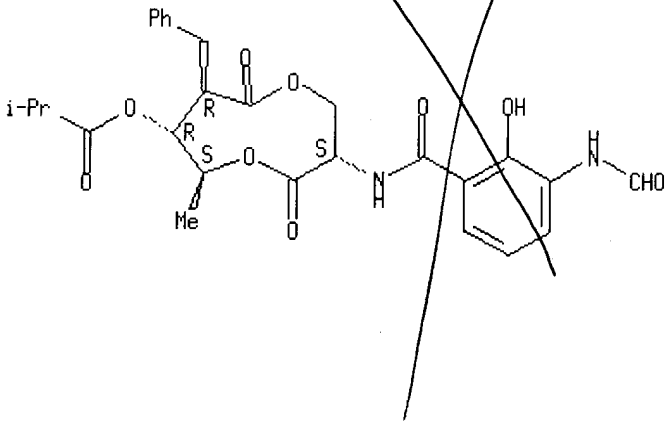
IN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[3-(formylamino)-2-hydroxybenzoyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C27 H30 N2 O9

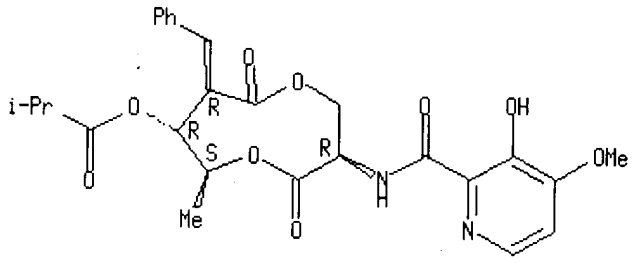
Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 24 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, (3R,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C26 H30 N2 O9

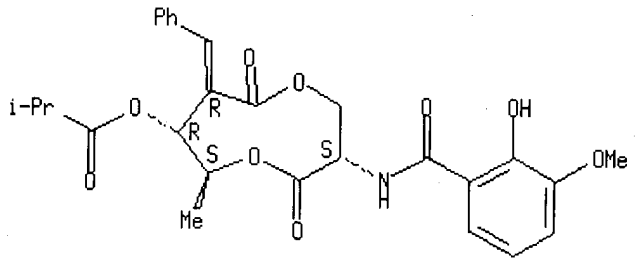
Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 24 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[(2-hydroxy-3-methoxybenzoyl)amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C27 H31 N O9

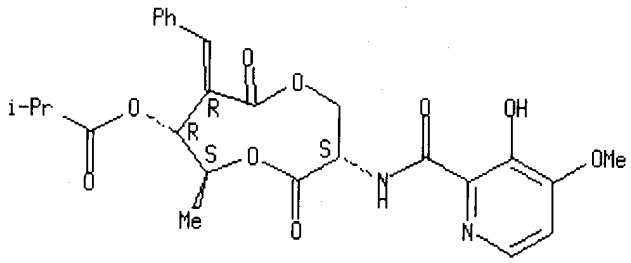
Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 24 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C26 H30 N2 O9

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1)23

L10 24 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
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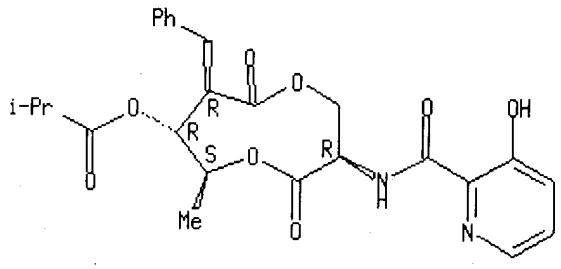
MF C25 H28 N2 O8

Absolute stereochemistry. Rotation (+).



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NEWS 5	May 12	EXTEND option available in structure searching
NEWS 6	May 12	Polymer links for the POLYLINK command completed in REGISTRY
NEWS 7	May 17	FRFULL now available on STN
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NEWS 10	May 27	Explore APOLLIT with free connect time in June 2004
NEWS 11	Jun 22	STN Patent Forums to be held July 19-22, 2004
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=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

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FILE LAST UPDATED: 5 Jul 2004 (20040705/ED)

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=> s 127:217524/dn
L1 1 127:217524/DN

=> sel rn
E1 THROUGH E1 ASSIGNED

=> delete select
DELETE ALL E# DEFINITIONS? (Y)/N:y
ALL E# DEFINITIONS DELETED

=> s 126:144017/dn
L2 1 126:144017/DN

=> sel rn
E1 THROUGH E10 ASSIGNED

=> file reg

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FULL ESTIMATED COST	5.12	5.33

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STRUCTURE FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8
DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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http://www.cas.org/ONLINE/DBSS/registryss.html

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1 166820-04-8/BI

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                186528-21-2/BI OR 186528-22-3/BI OR 186528-23-4/BI)

=> d scan

L3    10 ANSWERS   REGISTRY  COPYRIGHT 2004 ACS on STN
IN    2(5H)-Furanone, 5-methyl-3-(phenylmethyl)-, (5S)- (9CI)
MF    C12 H12 O2

Absolute stereochemistry.
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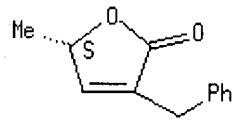


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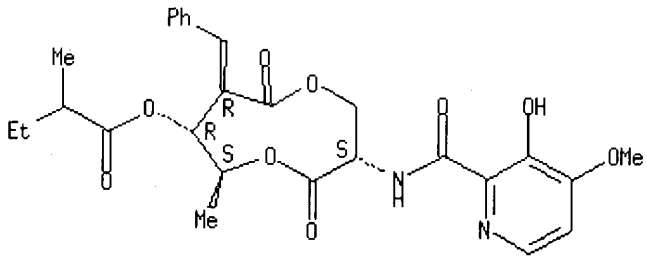
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) 9

L3    10 ANSWERS   REGISTRY  COPYRIGHT 2004 ACS on STN
IN    Butanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-
      pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-
      7-yl ester (9CI)
MF    C27 H32 N2 O9

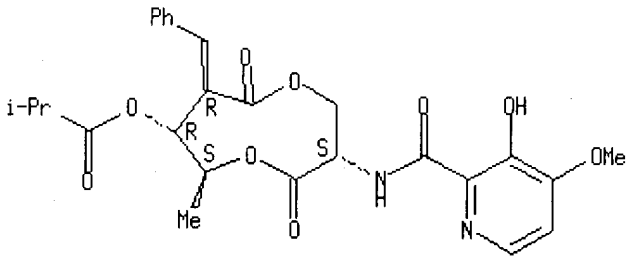
Absolute stereochemistry.
Currently available stereo shown.
```



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C26 H30 N2 O9

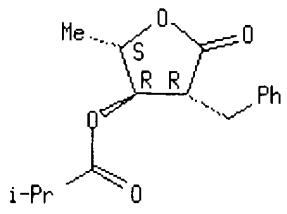
Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Arabinonic acid, 2,5-dideoxy-2-(phenylmethyl)-, γ-lactone, 3-(2-methylpropanoate) (9CI)
MF C16 H20 O4

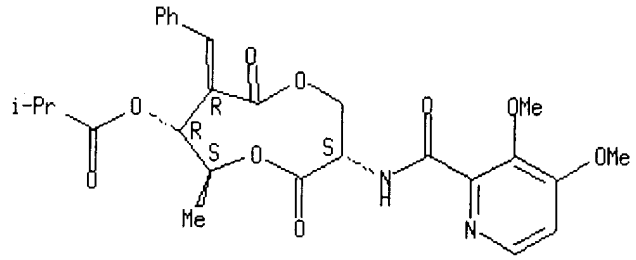
Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, 3-[[(3,4-dimethoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, [3S-(3R*,6R*,7S*,8S*)]- (9CI)
MF C27 H32 N2 O9

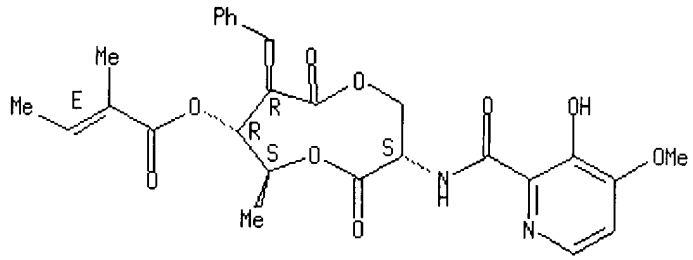
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 2-Butenoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, (2E)- (9CI)
MF C27 H30 N2 O9

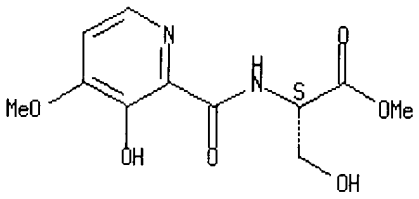
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Serine, N-[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]-, methyl ester (9CI)
MF C11 H14 N2 O6

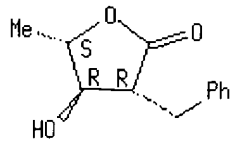
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Arabinonic acid, 2,5-dideoxy-2-(phenylmethyl)-, γ-lactone (9CI)
MF C12 H14 O3

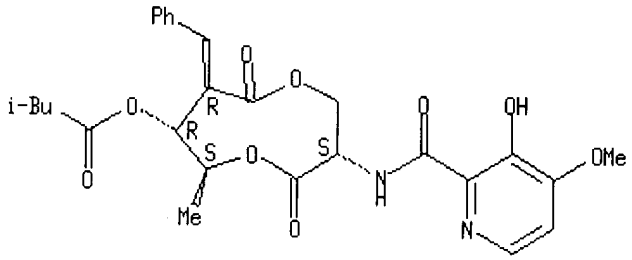
Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Butanoic acid, 3-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C27 H32 N2 O9

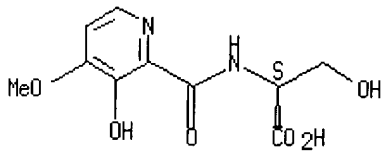
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 10 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN L-Serine, N-[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]- (9CI)
MF C10 H12 N2 O6

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.36	8.69

FILE 'HCAPLUS' ENTERED AT 11:40:06 ON 06 JUL 2004
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FILE COVERS 1907 - 6 Jul 2004 VOL 141 ISS 2
FILE LAST UPDATED: 5 Jul 2004 (20040705/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 125:109869/dn
L4 1 125:109869/DN

=> sel rn
E11 THROUGH E14 ASSIGNED

=> delete select
DELETE ALL E# DEFINITIONS? (Y)/N:y
ALL E# DEFINITIONS DELETED

=> sel rn
E1 THROUGH E4 ASSIGNED

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.64	11.33

FILE 'REGISTRY' ENTERED AT 11:40:27 ON 06 JUL 2004
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STRUCTURE FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8
DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> s e1-e4
1 167173-85-5/BI

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             1  167173-86-6/BI
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             1  167173-87-7/BI
                (167173-87-7/RN)
             1  167173-88-8/BI
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L5           4  (167173-85-5/BI OR 167173-86-6/BI OR 167173-87-7/BI OR 167173-88
                -8/BI)

=> d scan

L5    4 ANSWERS   REGISTRY  COPYRIGHT 2004 ACS on STN
IN    Butanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-
      pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-
      7-yl ester (9CI)
MF    C27 H32 N2 O9

Absolute stereochemistry.
Currently available stereo shown.
```

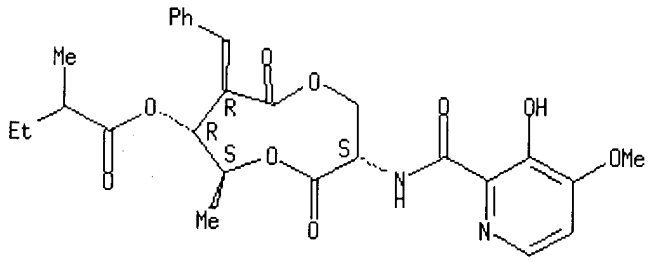


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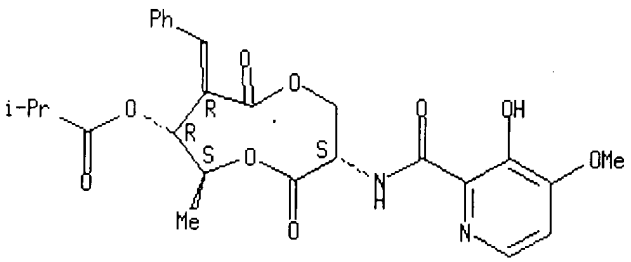
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1)3

L5    4 ANSWERS   REGISTRY  COPYRIGHT 2004 ACS on STN
IN    Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-
      pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-
      7-yl ester (9CI)
MF    C26 H30 N2 O9

Absolute stereochemistry.  Rotation (+).
```

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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
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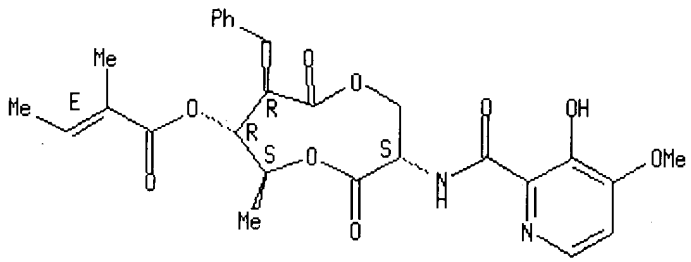
L5 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 2-Butenoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, (2E)- (9CI)
MF C27 H30 N2 O9

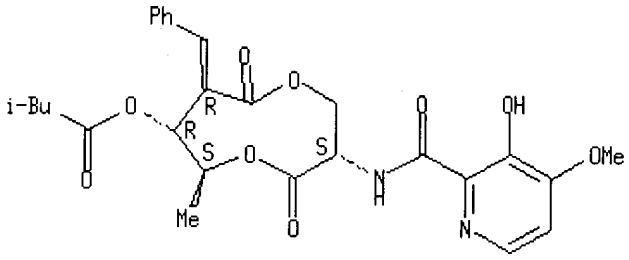
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Butanoic acid, 3-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C27 H32 N2 O9

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.84	12.17

FILE 'HCAPLUS' ENTERED AT 11:41:52 ON 06 JUL 2004
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FILE COVERS 1907 - 6 Jul 2004 VOL 141 ISS 2
FILE LAST UPDATED: 5 Jul 2004 (20040705/ED)

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=> delete select
DELETE ALL E# DEFINITIONS? (Y)/N:y
ALL E# DEFINITIONS DELETED

=> s 123:337552/dn
L6 1 123:337552/DN

=> sel rn
E1 THROUGH E4 ASSIGNED

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.56	14.73

FILE 'REGISTRY' ENTERED AT 11:42:18 ON 06 JUL 2004
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STRUCTURE FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8
DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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http://www.cas.org/ONLINE/DBSS/registryss.html

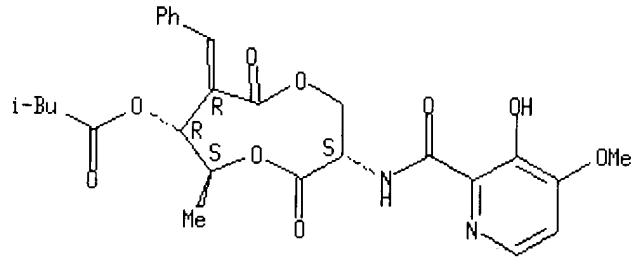
=> s e1-e4
1 167173-85-5/BI
(167173-85-5/RN)
1 167173-86-6/BI
(167173-86-6/RN)
1 167173-87-7/BI

(167173-87-7/RN)
1 167173-88-8/BI
(167173-88-8/RN)
L7 4 (167173-85-5/BI OR 167173-86-6/BI OR 167173-87-7/BI OR 167173-88-8/BI)

=> d scan

L7 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Butanoic acid, 3-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C27 H32 N2 O9

Absolute stereochemistry.

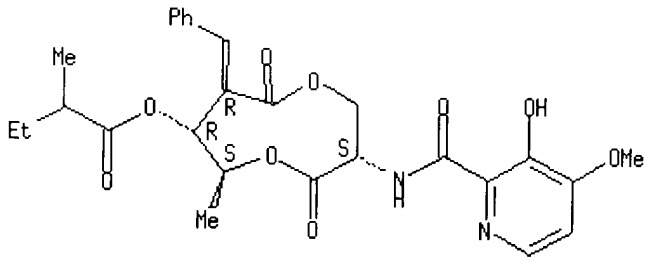


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1)3

L7 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Butanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)
MF C27 H32 N2 O9

Absolute stereochemistry.
Currently available stereo shown.

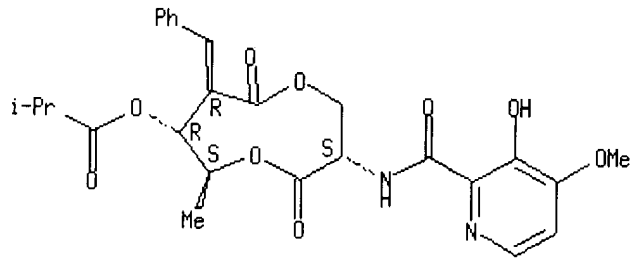


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI)

MF C26 H30 N2 O9

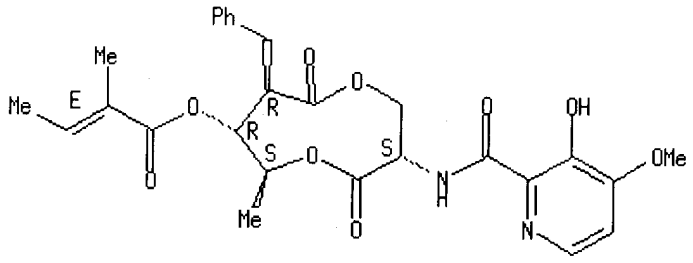
Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 2-Butenoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, (2E)- (9CI)
MF C27 H30 N2 O9

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=>

```
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NEWS  1            Web Page URLs for STN Seminar Schedule - N. America
NEWS  2            "Ask CAS" for self-help around the clock
NEWS  3   May 10   PROUSDDR now available on STN
NEWS  4   May 19   PROUSDDR: One FREE connect hour, per account, in both May
                   and June 2004
NEWS  5   May 12   EXTEND option available in structure searching
NEWS  6   May 12   Polymer links for the POLYLINK command completed in REGISTRY
NEWS  7   May 17   FRFULL now available on STN
NEWS  8   May 27   New UPM (Update Code Maximum) field for more efficient patent
                   SDIs in CAplus
NEWS  9   May 27   CAplus super roles and document types searchable in REGISTRY
NEWS 10   May 27   Explore APOLLIT with free connect time in June 2004
NEWS 11   Jun 22   STN Patent Forums to be held July 19-22, 2004
NEWS 12   Jun 28   Additional enzyme-catalyzed reactions added to CASREACT
NEWS 13   Jun 28   ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG,
                   and WATER from CSA now available on STN(R)

NEWS EXPRESS  MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
NEWS HOURS    STN Operating Hours Plus Help Desk Availability
NEWS INTER    General Internet Information
NEWS LOGIN    Welcome Banner and News Items
NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
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  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *


*MARPATPREV    - Preview File for the CAS Patent Markush File

  * The files listed above are temporarily unavailable.

FILE 'HOME' ENTERED AT 10:40:39 ON 06 JUL 2004

=> file reg
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'REGISTRY' ENTERED AT 10:40:49 ON 06 JUL 2004
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STRUCTURE FILE UPDATES:    5 JUL 2004  HIGHEST RN 704870-92-8
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DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

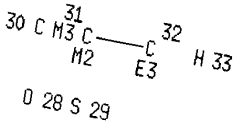
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

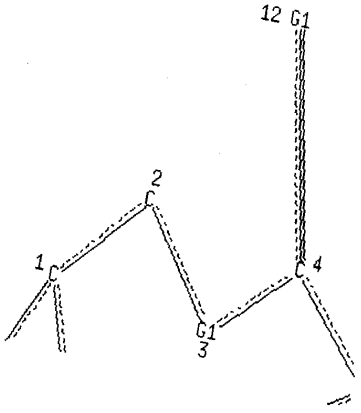
Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR

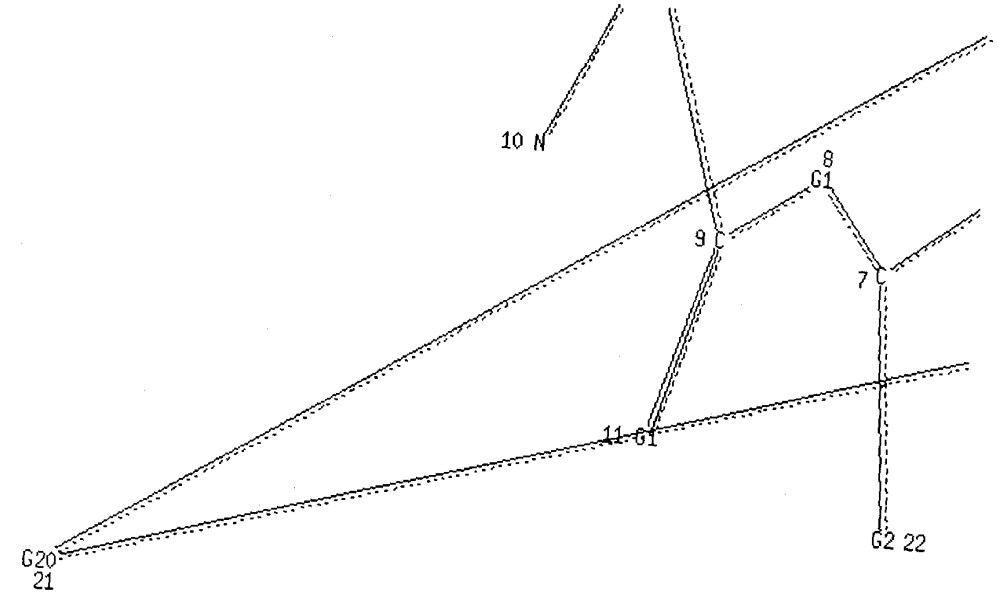


Page 1-A

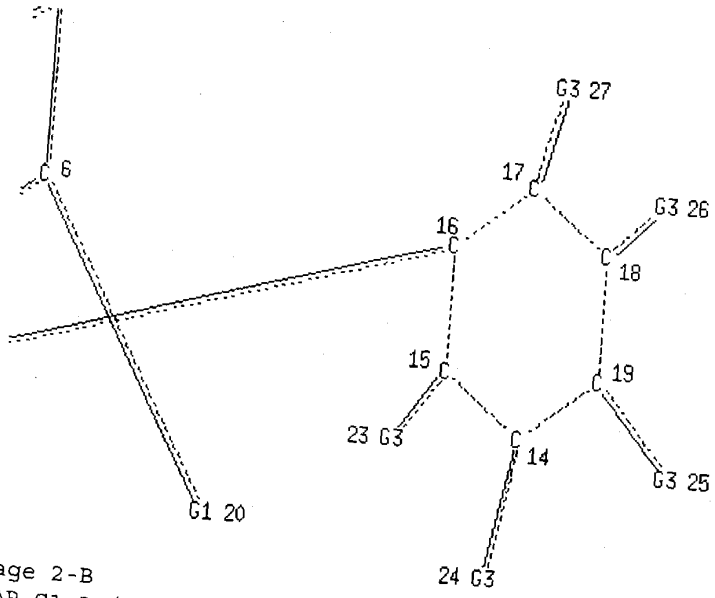


C 13

Page 1-B



Page 2-A



Page 2-B
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VAR G2=30/31/33
VAR G3=34/35
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HCOUNT	IS M2	AT	31
HCOUNT	IS E3	AT	32
HCOUNT	IS M3	AT	35
NSPEC	IS R	AT	1
NSPEC	IS R	AT	2
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NSPEC	IS R	AT	5
NSPEC	IS R	AT	6

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MLEVEL  IS CLASS  AT  10 13 30 31 32 33 34 35
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  35

STEREO ATTRIBUTES: NONE


=> s l1
SAMPLE SEARCH INITIATED 10:46:19 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    282 TO ITERATE

100.0% PROCESSED     282 ITERATIONS                          16 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         4633 TO     6647
PROJECTED ANSWERS:              80 TO      560

L2            16 SEA SSS SAM L1

=> s l1 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 10:46:29 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   6350 TO ITERATE

100.0% PROCESSED    6350 ITERATIONS                         319 ANSWERS
SEARCH TIME: 00.00.01

L3           319 SEA SSS FUL L1

=> file hcaplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
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FULL ESTIMATED COST 163.40 163.61

FILE 'HCAPLUS' ENTERED AT 10:53:02 ON 06 JUL 2004
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FILE COVERS 1907 - 6 Jul 2004 VOL 141 ISS 2
FILE LAST UPDATED: 5 Jul 2004 (20040705/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
L4 22 L3

=> file reg
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST 2.48 166.09

FILE 'REGISTRY' ENTERED AT 10:53:06 ON 06 JUL 2004
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STRUCTURE FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8
DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

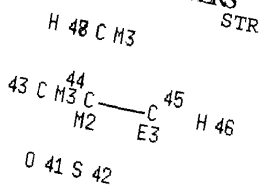
Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

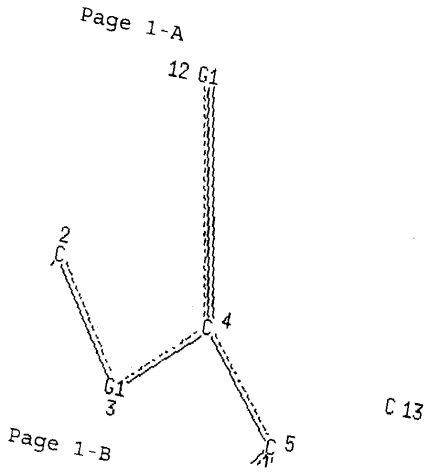
=>
L5 STRUCTURE UPLOADED

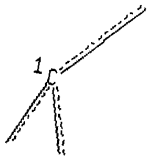
=> d l5

L5 HAS NO ANSWERS

L5 STR







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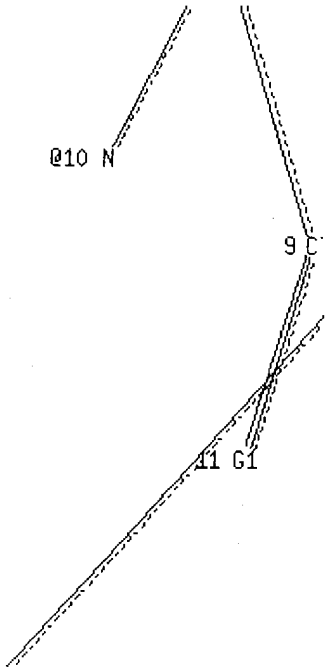

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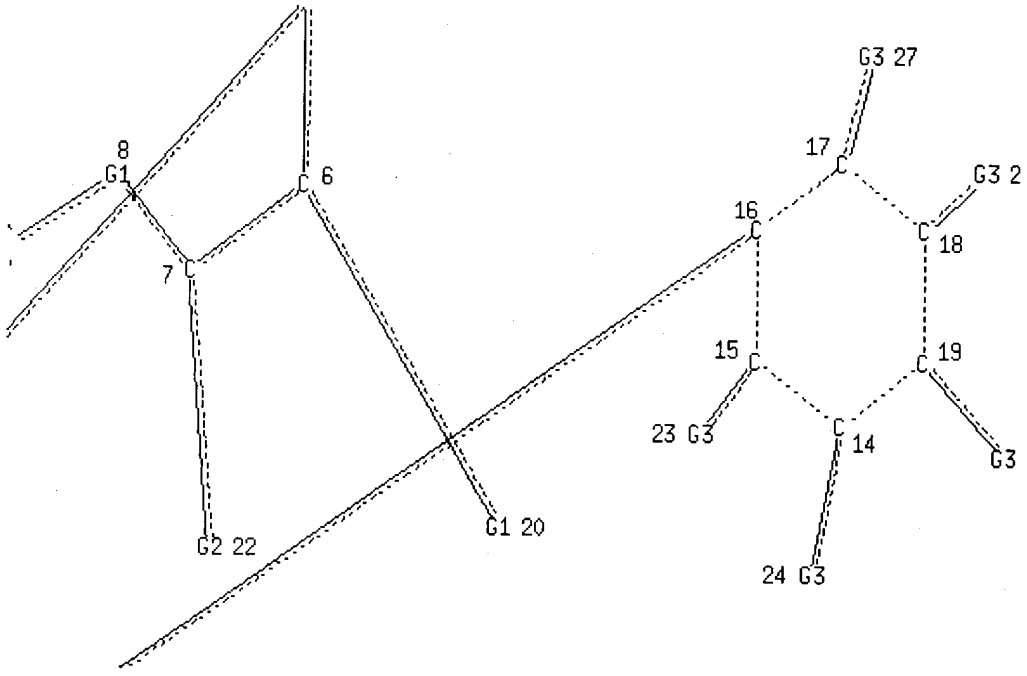

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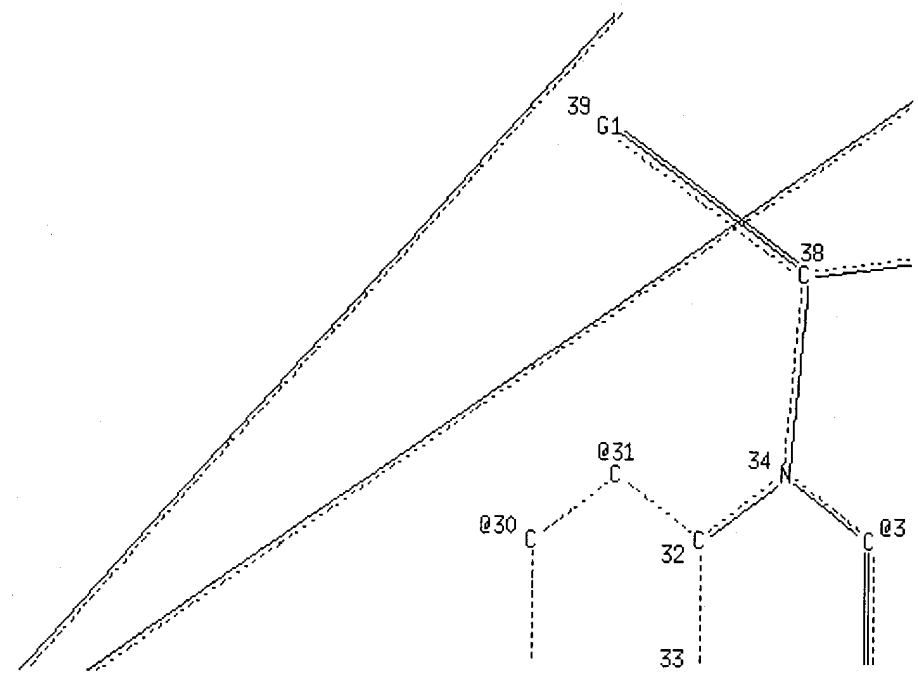

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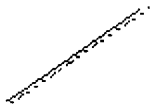

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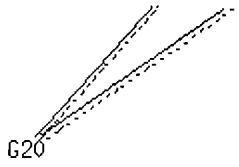

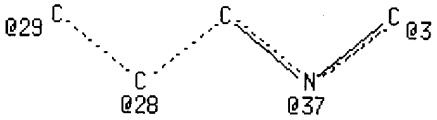

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Page 4-A

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Page 4-B

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VAR G3=47/48

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 RSPEC I
 NUMBER OF NODES IS  48

 STEREO ATTRIBUTES: NONE


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 SAMPLE SCREEN SEARCH COMPLETED -      0 TO ITERATE

 100.0% PROCESSED       0 ITERATIONS                          0 ANSWERS
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SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:            0 TO         0
PROJECTED ANSWERS:               0 TO         0

L6             0 SEA SSS SAM L5

=> s l5 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 10:56:34 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      8 TO ITERATE

100.0% PROCESSED       8 ITERATIONS                                 0 ANSWERS
SEARCH TIME: 00.00.01

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=> file hcaplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   157.52     323.61

FILE 'HCAPLUS' ENTERED AT 10:56:36 ON 06 JUL 2004
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FILE COVERS 1907 - 6 Jul 2004  VOL 141 ISS 2
FILE LAST UPDATED: 5 Jul 2004  (20040705/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


=> d his

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L2            16 S L1
L3           319 S L1 FULL

     FILE 'HCAPLUS' ENTERED AT 10:53:02 ON 06 JUL 2004
L4            22 S L3
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             23 SAKANAKA, O?/AU
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L8   ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2004 ACS on STN
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Full Text | Citing References

ACCESSION NUMBER: 1999:511149 HCAPLUS
DOCUMENT NUMBER: 131:129825
TITLE: Novel antifungal compounds and process for producing the same
INVENTOR(S): **Sakanaka, Osamu**; Teraoka, Takeshi; Mitomo, Koichi; Tamura, Takayoshi; Murai, Yasushi; Iinuma, Katsuharu; Kuzuhara, Kikuko; Mikoshiba, Haruki; Taniguchi, Makoto
PATENT ASSIGNEE(S): Meiji Seika Kaisha, Ltd., Japan
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9940081	A1	19990812	WO 1999-JP541	19990208
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2319807	AA	19990812	CA 1999-2319807	19990208
AU 9924398	A1	19990823	AU 1999-24398	19990208
AU 751098	B2	20020808		
EP 1054011	A1	20001122	EP 1999-903901	19990208
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
NZ 506249	A	20030429	NZ 1999-506249	19990208

PRIORITY APPLN. INFO.: JP 1998-26257 A 19980206
WO 1999-JP541 W 19990208

OTHER SOURCE(S): MARPAT 131:129825
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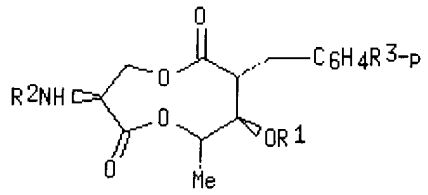


I

AB The title compds. [I; R1 = iso-Bu, tigloyl, isovaleryl, 2-methylbutanoyl; R2 = H, arom. acyl, protecting group such substituted benzoyl, substituted nicotinoyl; R3 = H, nitro, amino, acylamino, N,N-dialkylamino; with provisos] are prepd. Thus, UK-2A in CH2Cl2 contg. pyridine and PCl5 was refluxed for 1.5 h, the reaction mixt. was allowed to cool and then reacted with methanol for 15 h to give (2R,3R,4S,7S)-7-amino-2-benzyl-5,9-dioxa-3-isobutyryloxy-4-methyl-1,6-cyclononanedione. In an antifungal test, (2R,3R,4S,7S)-7-(2-hydroxynicotinylamino)-2-benzyl-5,9-dioxa-3-isobutyryl-4-methyl-1,6-cyclononanedione (also prepd.) at 0.05 μg showed potency almost double that of UK-2A against Saccharomyces cerevisiae.

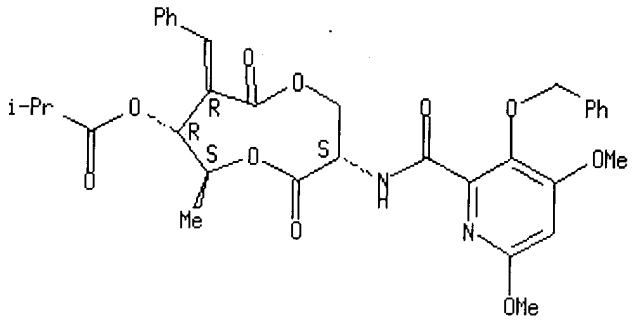
IT **234112-85-7P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of UK-2A derivs. as antifungals)

RN 234112-85-7 HCAPLUS

CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[[4,6-dimethoxy-3-(phenylmethoxy)-2-pyridinyl]carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1999:184083 HCAPLUS
DOCUMENT NUMBER: 130:193104
TITLE: Rice blast controlling agents and wheat scab controlling agents
INVENTOR(S): Teraoka, Takeshi; Kuzuhara, Kikuko; Mikoshiba, Haruki; Matsumoto, Kuniomi; Iinuma, Katsuharu; Futamura, Takafumi; Yasutake, Tetsuya; **Sakanaka, Osamu**; Mitomo, Koichi; Taniguchi, Makoto
PATENT ASSIGNEE(S): Meiji Seika Kaisha, Ltd., Japan
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9911127	A1	19990311	WO 1998-JP3876	19980831
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9888878	A1	19990322	AU 1998-88878	19980831
EP 1013169	A1	20000628	EP 1998-940634	19980831
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: JP 1997-233658 A 19970829
WO 1998-JP3876 W 19980831

OTHER SOURCE(S): MARPAT 130:193104
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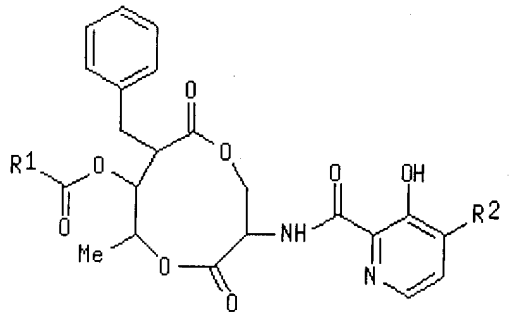


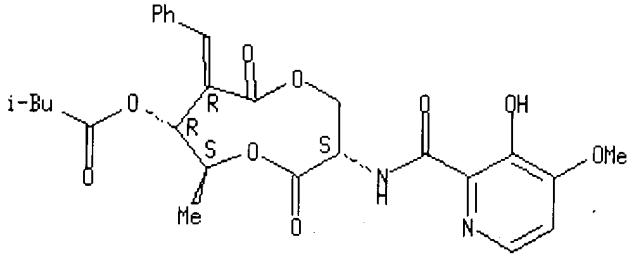
I

AB These agents contain a compd. represented by formula (I) in which R1 represents alkyl or alkenyl and R2 represents hydrogen or methoxy. The compd. is highly effective in preventing rice blast and wheat scab and is not injurious to the plants. Specific compds. used in the examples are obtained by the method described in a publication presented earlier. Activities of I where R1 = iso-Pr and R2 = H (1), R1 = iso-Pr and R2 = OMe (2), R1 = (Z)-2-butenyl and R2 = OMe (3), R1 = iso-Bu and R2 = OMe (4), and R1 = sec-Bu and R2 = OMe (5), were demonstrated.

IT **167173-87-7**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(as rice blast controlling agents and wheat scab controlling agents)

RN 167173-87-7 HCAPLUS
CN Butanoic acid, 3-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1999:19692 HCAPLUS
DOCUMENT NUMBER: 130:168617
TITLE: UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02 III. Absolute configuration of an antifungal antibiotic, UK-2A, and consideration of its conformation
AUTHOR(S): Shibata, Kozo; Hanafi, Muhammad; Fujii, Jyunko; **Sakanaka, Osamu**; Iinuma, Katsuharu; Ueki, Masashi; Taniguchi, Makoto
CORPORATE SOURCE: Faculty of Science, Osaka City University, Osaka, 558-8585, Japan
SOURCE: Journal of Antibiotics (1998), 51(12), 1113-1116
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English
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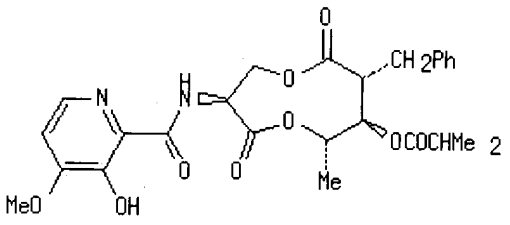

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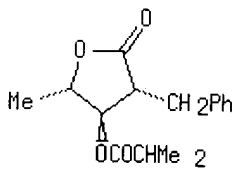

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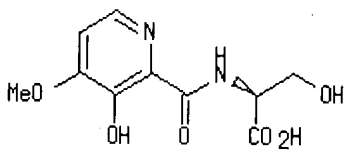


III

AB The abs. configuration of UK-2A (I) was detd. by the elucidation of the abs. configurations of butanolide II and the serine deriv. III, the products of alk. hydrolysis of I. The abs. configuration of UK-2A was found to be (+)-(2R,3R,4S,7S).

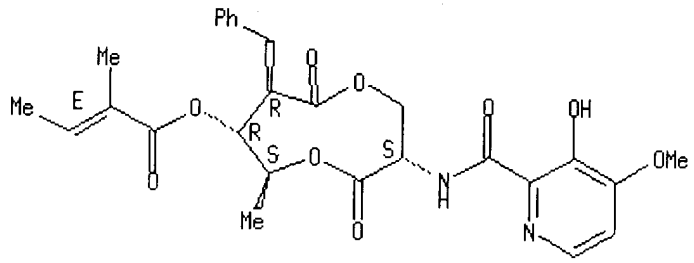
IT **167173-86-6**, UK 2B
RL: MSC (Miscellaneous)
(detn. of the abs. configuration of UK-2A, an antifungal antibiotic)

RN 167173-86-6 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-

7-yl ester, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L1 STRUCTURE UPLOADED
L2 16 S L1
L3 319 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 10:53:02 ON 06 JUL 2004
L4 22 S L3

FILE 'REGISTRY' ENTERED AT 10:53:06 ON 06 JUL 2004
L5 STRUCTURE UPLOADED
L6 0 S L5
L7 0 S L5 FULL

FILE 'HCAPLUS' ENTERED AT 10:56:36 ON 06 JUL 2004
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L9 19 L4 NOT L8

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41 MITOMO, K?/AU
L10 0 L9 AND MITOMO, K?/AU

=> s l9 and tamura, t?/au
4720 TAMURA, T?/AU
L11 0 L9 AND TAMURA, T?/AU

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L12 0 L9 AND MURAI, Y?/AU

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335 IINUMA, K?/AU
L13 0 L9 AND IINUMA, K?/AU

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L14 0 L9 AND TERAOKA, T?/AU

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L15          0 L9 AND KUZUHARA, K?/AU

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L16          0 L9 AND MIKOSHIBA, H?/AU

=> s l9 and taniguchi, m?/au
          3353 TANIGUCHI, M?/AU
L17         10 L9 AND TANIGUCHI, M?/AU

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L17  ANSWER 1 OF 10  HCAPLUS  COPYRIGHT 2004 ACS on STN
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Full Text | Citing References

ACCESSION NUMBER: 2002:508203 HCAPLUS
DOCUMENT NUMBER: 137:279002
TITLE: UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02 VI (2). Structure-activity relationships of UK-2A
AUTHOR(S): Usuki, Yoshinosuke; Goto, Kimihiko; Kiso, Tetsuo; Tani, Kazunori; Ping, Xu; Fujita, Ken-Ichi; Iio, Hideo; **Taniguchi, Makoto**
CORPORATE SOURCE: Graduate School of Science, Osaka City University, Osaka, 558-8585, Japan
SOURCE: Journal of Antibiotics (2002), 55(6), 607-610
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English
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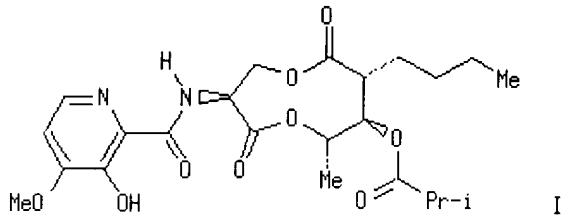
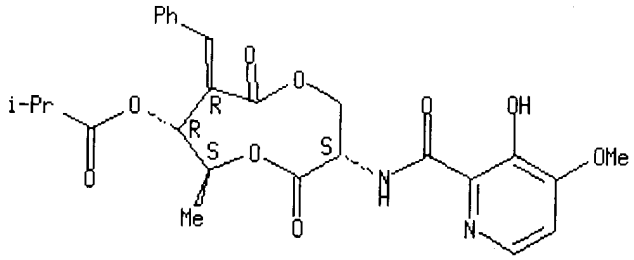


I

AB UK-2A and antimycin A3 analogs, e.g. I, were tested for their respiratory inhibition in bovine heart SMP and their cytotoxic activity was measured against porcine renal proximal tubule cells. The structure activity relationship was examd. as well.

IT **167173-85-5**, UK-2A
RL: BSU (Biological study, unclassified); BIOL (Biological study) (respiratory inhibition, cytotoxicity, and structure-activity relationships of UK-2A and antimycin A3 synthetic hybrids)
RN 167173-85-5 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

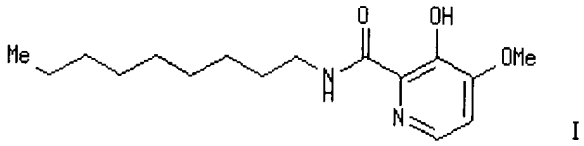


REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 2002:262139 HCAPLUS
DOCUMENT NUMBER: 137:30441
TITLE: UK-2A, B, C, and D, novel antifungal antibiotics from Streptomyces sp. 517-02: VII. Membrane injury induced by C9-UK-2A, a derivative of UK-2A, in Rhodotorula mucilaginosa IFO 0001
AUTHOR(S): Tani, Kazunori; Usuki, Yoshinosuke; Motoba, Kazuhiko; Fujita, Ken-Ichi; **Taniguchi, Makoto**
CORPORATE SOURCE: Graduate School of Science, Osaka City University, Osaka, 558-8585, Japan
SOURCE: Journal of Antibiotics (2002), 55(3), 315-321
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



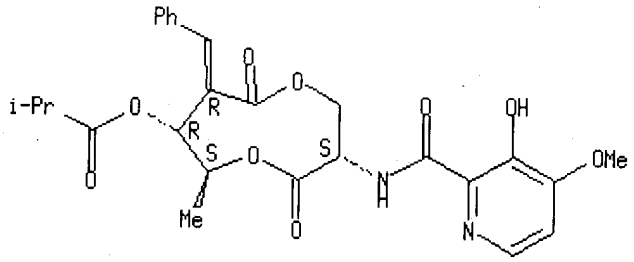
I

AB UK-2A is a potent antifungal antibiotic and its structure is highly similar to that of antimycin A3 (AA). UK-2A and AA inhibit mitochondrial electron transport at complex III. However, the antifungal activities of UK-2A and AA disappear after 48-h treatment. In an attempt to improve the duration of the antifungal activity of UK-2A, several UK-2A derivs. were prepd. by substituting its nine-membered dilactone ring with an n-alkyl or an isoprenyl moiety. Among all the derivs. tested, C9-UK-2A (I) and C10-UK-2A showed the most potent and durable antifungal activities against a strict aerobic yeast, Rhodotorula mucilaginosa IFO 0001. I, in particular, continued to demonstrate its broad-spectrum antifungal activity after 120-h treatment. Therefore, we focused on I to further examine its mode of action against the yeast. Interestingly, I did not inhibit cellular respiration of the cells even at concns. greater than 100 μg/mL. I gradually induced the efflux of potassium ions from the cells. Moreover, I gradually induced the release of glucose from glucose-encapsulating liposomes. The patterns of efflux and release induced by I were not as rapid as those seen with amphotericin B. These results suggest a membrane injury caused by I in R. mucilaginosa IFO 0001.

IT **167173-85-5**, UK-2A
RL: PAC (Pharmacological activity); BIOL (Biological study)
(activity of UK-2A and derivs. against Rhodotorula mucilaginosa)

RN 167173-85-5 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

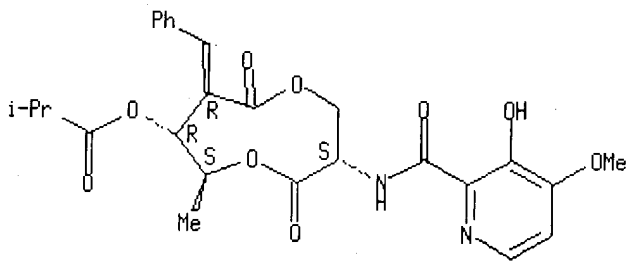
ACCESSION NUMBER: 2001:557166 HCAPLUS
DOCUMENT NUMBER: 135:300904
TITLE: UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02. VI (1). Structure-activity relationships of UK-2A
AUTHOR(S): Usuki, Yoshinosuke; Tani, Kazunori; Fujita, Ken-Ichi; **Taniguchi, Makoto**
CORPORATE SOURCE: Graduate School of Science, Osaka City University, Osaka, 558-8585, Japan
SOURCE: Journal of Antibiotics (2001), 54(7), 600-602
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The synthesis of UK-2A analogs, where the nine-membered dilactone residue was replaced by several alkyl or isoprenyl moieties, and their biol. effects were studied. All the tested compds., such as UK-2A, AA, and their derivs., did not show any growth inhibitory activity against both Gram-neg. and Gram-pos. bacteria up to 100μg/mL. Salicylic acid moiety or pyridinecarboxylic acid moiety plus a hydrophobic structure is at least necessary for expression of antifungal action. The 9-membered dilactone ring moiety itself is not essential for the antimicrobial activity, and C8-alkyl group is flexible and hydrophobic that makes C8-UK-2A interact the binding domain to prevent yeasts and filamentous fungi from growing. The decrease in activity of isoprenylated UK-2A derivs. was due to a loss of flexibility, which interferes in their taking active conformations. AA had strong cytotoxicity against porcine renal proximal tubule LLC-PK1 cells and other types of cultured cells compared to UK-2A. The inhibitory of UK-2A and AA for the uncoupler stimulated respiration of bovine heart submitochondrial particles was examd. C8-3MeOSA showed comparably high inhibitory activity similar to C8-AA and AA, although its antimicrobial activities were weaker than those were. The mode of action of C8-UK-2A would be different from that of UK-2A.

IT **167173-85-5**, UK-2A
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02. VI (1). Structure-activity relationships of UK-2A)

RN 167173-85-5 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

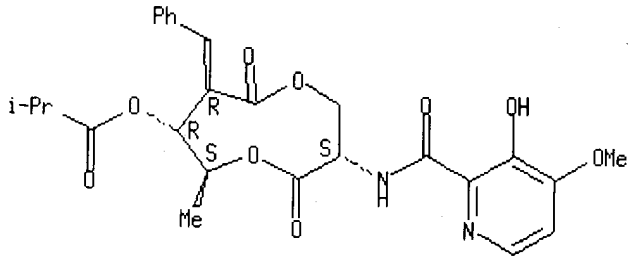
ACCESSION NUMBER: 1999:574605 HCAPLUS
DOCUMENT NUMBER: 131:297409
TITLE: UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02 V. Inhibition mechanism of bovine heart mitochondrial cytochrome bc1 by the novel antibiotic UK-2A
AUTHOR(S): Machida, Kiyotaka; Takimoto, Hiroaki; Miyoshi, Hideto; **Taniguchi, Makoto**
CORPORATE SOURCE: Department of Biology, Graduate School of Science, Osaka City University, Osaka, 558-8585, Japan
SOURCE: Journal of Antibiotics (1999), 52(8), 748-753
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB UK-2A is a potent antifungal antibiotic isolated from Streptomyces sp. 517-02 and its structure is highly similar to that of antimycin A. The authors investigated the inhibition mechanism of bovine heart mitochondrial cytochrome bc1 complex by the UK-2A using antimycin A and myxothiazol as the ref. inhibitors of ubiquinol oxidn. (Qo) and ubiquinone redn. (Qi) sites, resp. The inhibitory potency of UK-2A was about 3-fold less than antimycin A. On the basis of the effects of UK-2A on the redn. kinetics of b and c1 hemes, this compd. appeared to be an inhibitor of the Qi site. However, since spectral changes of dithionite-reduced cytochrome b induced by UK-2A binding differed from that of antimycin A, the precise binding manner of UK-2A to the enzyme is not identical to that of antimycin A. It could be concluded that antimycin A binding to cytochrome b is primarily decided by structural specificity of the salicylic acid moiety.

IT **167173-85-5**, Antibiotic UK-2A
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(UK-2A, B, C and D as novel antifungal antibiotics from Streptomyces)

RN 167173-85-5 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1999:368241 HCAPLUS
DOCUMENT NUMBER: 131:125082
TITLE: UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02: IV. Comparative studies of UK-2A with antimycin A3 on cytotoxic activity and reactive oxygen species generation in LLC-PK1 cells
AUTHOR(S): Takimoto, Hiroaki; Machida, Kiyotaka; Ueki, Masashi; Tanaka, Toshio; **Taniguchi, Makoto**
CORPORATE SOURCE: Department of Biology, Graduate School of Science, Osaka City University, Osaka, 558-8585, Japan
SOURCE: Journal of Antibiotics (1999), 52(5), 480-484
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB UK-2A, a novel antifungal antibiotic, is a structural relative of antimycin A3 (AA) and its mode of action is similar to that of AA which inhibits mitochondrial electron transport at complex III. In spite of their structural resemblance, AA had strong cytotoxicity while UK-2A had little cytotoxicity against LLC-PK1 cells as well as other types of cultured cells. When cells were treated with UK-2A or with AA the intracellular ATP content decreased significantly within 5 min in glucose-free medium to almost the same extent in both cases. Moreover, under the same conditions, UK-2A killed cells at a similar rate to AA. This suggested that UK-2A entered into the cells and, like AA, inhibited mitochondrial electron transport. On the other hand, AA stimulated reactive oxygen species (ROS) prodn. within 5 min even at a low concn. of 1 μM whereas UK-2A did not show such an effect. The difference in the ROS-producing abilities of UK-2A and AA may account for the different cytotoxic effects of the two compds.

IT **167173-85-5**, UK-2A
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(comparative studies of UK-2A with antimycin A3 on cytotoxic activity and reactive oxygen species generation in LLC-PK1 cells)

RN 167173-85-5 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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L3          319 S L1 FULL

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L4           22 S L3

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L12           0 S L9 AND MURAI, Y?/AU
L13           0 S L9 AND IINUMA, K?/AU
L14           0 S L9 AND TERAOKA, T?/AU
L15           0 S L9 AND KUZUHARA, K?/AU
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L18           9 L9 NOT L17

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L18  ANSWER 1 OF 9  HCAPLUS  COPYRIGHT 2004 ACS on STN
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Full Text | Citing References

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ACCESSION NUMBER:          2003:335078  HCAPLUS
DOCUMENT NUMBER:           138:337882
TITLE:                     Preparation of UK-2A derivatives as agricultural
                           fungicides
INVENTOR(S):               Meyer, Kevin Gerald; Rogers, Richard Brewer; Yao,
                           Chenglin; Niyaz, Normohammed Mohamed; Adamski Butz,
                           Jenifer Lynn; Nader, Bassam Salim
PATENT ASSIGNEE(S):        Dow Agrosciences Llc Patent Department, USA
SOURCE:                    PCT Int. Appl., 39 pp.
                           CODEN: PIXXD2
DOCUMENT TYPE:             Patent
LANGUAGE:                  English
FAMILY ACC. NUM. COUNT:    1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
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     WO 2003035617      A2   20030501      WO 2002-US33947  20021023
     WO 2003035617      A3   20031113
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,
             US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
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NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 2001-335814P P 20011023
OTHER SOURCE(S): MARPAT 138:337882
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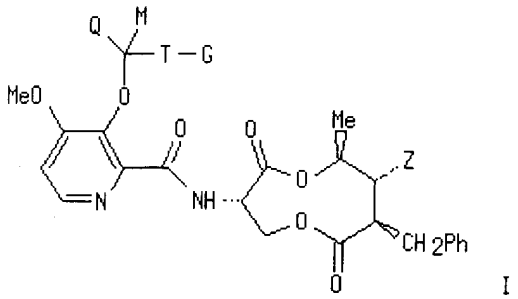

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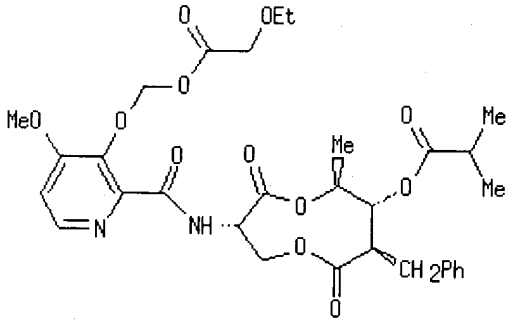


II

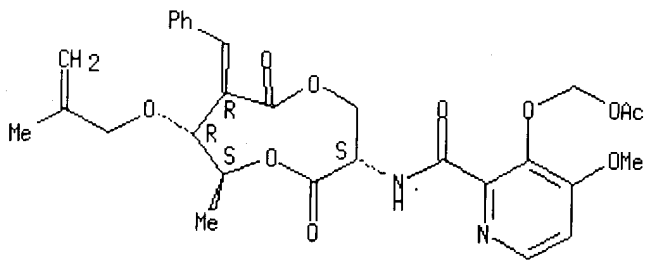
AB Derivs. of UK-2A of formula I [Z = H, alkoxy, acyl, OC(O)Oalkyl, OC(O)dialkylamino, etc.; Q, M = H, Me, Et, CF3, Ph, vinyl, cyclopropyl; T = O, OC(O), OCO2, S, SC(O), SCO2; G = H, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl] are provided for the treatment of plant fungal diseases. Thus, II was prepd. from UK-2A. The prepd. compds. were tested for control of in vivo whole plant fungal infection.

IT **512192-31-3P**
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of UK-2A derivs. as agricultural fungicides)

RN 512192-31-3 HCAPLUS

CN 2-Pyridinecarboxamide, 3-[(acetyloxy)methoxy]-4-methoxy-N-[(3S,7R,8R,9S)-9-methyl-8-(2-methyl-2-propenyl)-2,6-dioxo-7-(phenylmethyl)-1,5-dioxonan-3-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 2003:301046 HCAPLUS
DOCUMENT NUMBER: 138:321054
TITLE: Process to produce alkyl-ether derivatives of UK-2A
INVENTOR(S): Niyaz, Normohammed Mohamed; Deamicis, Carl Vincent; Rogers, Richard Brewer; Meyer, Kevin Gerald; Dent, William Hunter, III; Anzeveno, Peter Biagio
PATENT ASSIGNEE(S): Dow Agrosciences LLC, USA
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003031403	A2	20030417	WO 2002-US31848	20021004
WO 2003031403	A3	20030918		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-327547P P 20011005
OTHER SOURCE(S): MARPAT 138:321054
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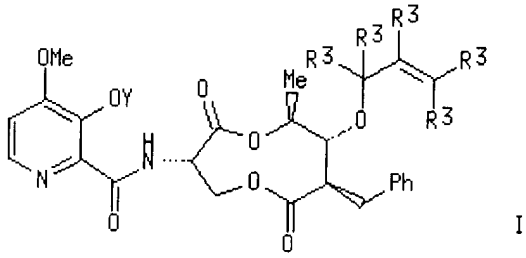

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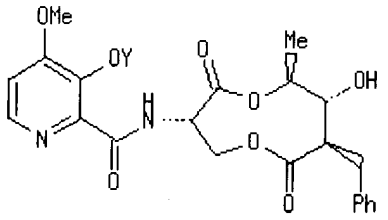
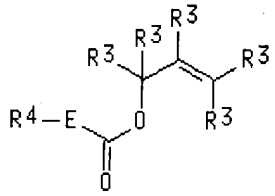


II



III

AB A process is disclosed for the prepn. of allyl-alkyl ether derivs. I [Y = H, benzyl, Si(alkyl)3, etc.; R3 = H, alk(en/yn)yl, cycloalkyl, (hetero)aryl] of antibiotic UK-2A. The process is comprised of coupling

II with III [E = O, NR6; R4, R6 = alkyl, aryl] in the presence of a catalyst complex and solvent. For instance II [Y = PhCH2] was coupled to Et methallylcarbonate (dppf, Pd2dba3) to give the corresponding methallyl deriv. of I. Several examples are provided and subsequent sidechain redn. is also described.

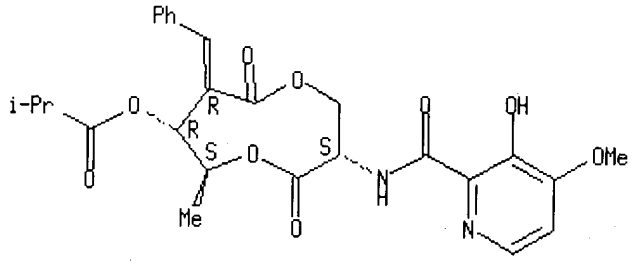
IT **167173-85-5**

RL: RCT (Reactant); RACT (Reactant or reagent)
(palladium catalyzed allylation process to produce alkyl-ether derivs. of UK-2A)

RN 167173-85-5 HCAPLUS

CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L18 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN

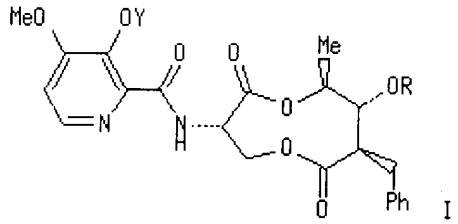
Full Text | Citing References

ACCESSION NUMBER: 2003:117821 HCAPLUS
DOCUMENT NUMBER: 138:153370
TITLE: Preparation of UK-2A derivatives via reductive cleavage of the exocyclic ester of UK-2A or its derivatives
INVENTOR(S): Meyer, Kevin Gerald; Niyaz, Normohammed Mohamed; Deamicis, Carl Vincent; Rogers, Richard Brewer
PATENT ASSIGNEE(S): Dow Agrosciences LLC, USA
SOURCE: PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003011857	A1	20030213	WO 2002-US24204	20020731
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1412351	A1	20040428	EP 2002-756820	20020731
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				

PRIORITY APPLN. INFO.: US 2001-308939P P 20010731
WO 2002-US24204 W 20020731

OTHER SOURCE(S): CASREACT 138:153370; MARPAT 138:153370
GI



I

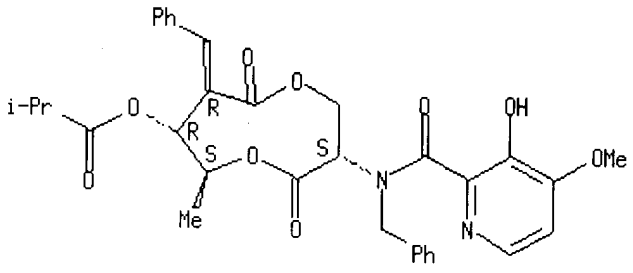
AB The present invention discloses a process for the prepn. of UK-2A derivs., such as I [R = H; Y = H, (un)substituted benzyl, CH2OC1-8 alkyl, CH2OC3-8 cycloalkyl, allyl, (un)substituted tetrahydropyranyl, (un)substituted tetrahydrofuranyl, Si(C1-4 alkyl)3, and Si(Ph)x(C1-4 alkyl)3-x where x = 1-3], via reductive cleavage of the exocyclic ester of UK-2A I [R = OCOCH(Me)2; Y = H (II)] or its derivs., such as I [R = COCH(Me)2; Y = H, (un)substituted benzyl, CH2OC1-8 alkyl, CH2OC3-8 cycloalkyl, allyl, (un)substituted tetrahydropyranyl, (un)substituted tetrahydrofuranyl, Si(C1-4 alkyl)3, and Si(Ph)x(C1-4 alkyl)3-x where x = 1-3], in the presence of a reducing agent and in the presence of an aprotic solvent. Thus, II was reacted with benzyl bromide to afford O-benzylated deriv. I [R = OCOCH(Me)2; Y = CH2Ph], which was treated with diisobutylaluminum hydride to afford UK-2A deriv. I [R = H; Y = CH2Ph].

IT **496781-73-8P**
RL: BYP (Byproduct); PREP (Preparation)
(prepn. of UK-2A derivs. via reductive cleavage of the exocyclic ester of UK-2A or its derivs.)

RN 496781-73-8 HCAPLUS

CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl](phenylmethyl)amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 2001:152650 HCAPLUS
DOCUMENT NUMBER: 134:207831
TITLE: Preparation, composition and use of heterocyclic aromatic amides as fungicides

INVENTOR(S): Ricks, Michael John; Dent, William Hunter, III; Rogers, Richard Brewer; Yao, Chenglin; Nader, Bassam Salim; Miesel, John Louis; Fitzpatrick, Gina Marie; Meyer, Kevin Gerald; Niyaz, Noormohamed Mohamed; Morrison, Irene Mae; Henry, Matthew James; Adamski, Butz Jenifer Lynn; Gajewski, Robert Peter
PATENT ASSIGNEE(S): Dow Agrosciences LLC, USA
SOURCE: PCT Int. Appl., 200 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001014339	A2	20010301	WO 2000-US21523	20000804
WO 2001014339	A3	20011115		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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AU 2000065267	A5	20010319	AU 2000-65267	20000804
US 6355660 ~NO	B1	20020312	US 2000-632930	20000804
EP 1204643	A2	20020515	EP 2000-952599	20000804
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EP 1234825	A3	20030618		
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EP 1234826	A3	20030618		
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EP 1234827	A3	20030618		
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TR 200200409	T2	20030321	TR 2002-200200409	20000804
BR 2000013469	A	20030429	BR 2000-13469	20000804
JP 2003527324	T2	20030916	JP 2001-518428	20000804
US 2002177578 ~NO	A1	20021128	US 2001-22413	20011213
US 2003018052 ~NO	A1	20030123	US 2001-22207	20011213
US 2003018012 ~NO	A1	20030123	US 2001-22511	20011213
US 6706740 ~NO	B2	20040316		
US 2003022902 ~NO	A1	20030130	US 2001-22483	20011213

US 2003022903	A1	20030130	US 2001-23497		20011213
ZA 2002000435	A	20030117	ZA 2002-435		20020117
US 2004034025	A1	20040219	US 2002-307844		20021202
US 2004048864	A1	20040311	US 2002-307710		20021202
PRIORITY APPLN. INFO.:			US 1999-149977P	P	19990820
			US 1999-150248P	P	19990823
			US 2000-620662	A	20000720
			US 1999-144676P	P	19990720
			EP 2000-952599	A3	20000804
			US 2000-632930	A3	20000804
			WO 2000-US21523	W	20000804

OTHER SOURCE(S): MARPAT 134:207831
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

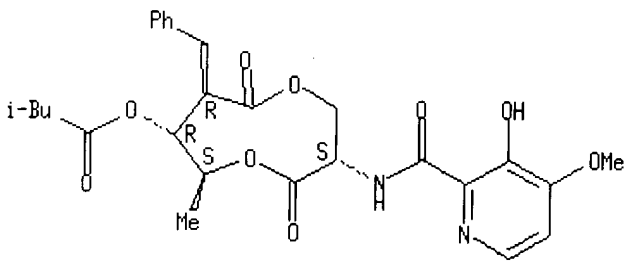
AB Title compds. [I; wherein X1-X4 independently = O, S, NR1, N, CR2, bond; R1 = H, C1-3 alkyl, C2-3 alkenyl, C2-3 alkynyl, OH, CHF2,C1-4 alkoxy; R2 = H, F, Cl, Br, CN, OH, C1-3 alkyl, C1-3 haloalkyl cyclopropyl, C1-3 alkoxy; Z = O, S, NOH, NOR3; R3 = C1-3 alkyl; A = C1-14 alkyl, C1-14 alkynyl, C1-14 cycloalkyl, aryl, heteroaryl, Q; M = H, Si(t-Bu)Me2, Si(Ph)Me2, SiEt3, CZR4, SO2R5; R4 = H, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl; R5 = aryl, heteroaryl, C1-6 alkyl, C2-6 alkenyl, C3-6 alkenyl, C3-6 alkynyl, C3-6 cycloalkyl; X, Y independently = O, S; W = O, CH2, bond; R = C1-8 alkyl, C2-8 alkenyl, C2-8 alkynyl, C3-8 cycloalkyl, aryl, heteroaryl; R11 = H, C1-3 alkyl, C2-5 alkenyl, C2-5 alkynyl; R10 = H, R, OR, OCOR, OCOOR; R8, R9 independently = H, C1-6 alkyl, C2-6 alkenyl; R6, R7 independently = H, C1-6 alkyl, C2-6 alkenyl, C2-5 alkynyl, C3-6 cycloalkyl] are prepd. as fungicides involving application methods of effective usage of title compds. to control fungi, particularly plant pathogens and wood decaying fungi. The invention also encompasses hydrates, salts and complexes thereof. The title compd. II was prepd. and tested as fungicide.

IT **167173-87-7P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and fungicidal activity of heterocyclic arom. amides)

RN 167173-87-7 HCAPLUS

CN Butanoic acid, 3-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 2001:63978 HCAPLUS
DOCUMENT NUMBER: 134:131431
TITLE: Fungicidal heterocyclic aromatic amides and their compositions, methods of use and preparation
INVENTOR(S): Ricks, Michael John; Dent, William Hunter, III; Rogers, Richard Brewer; Yao, Chenglin; Nader, Bassam Salim; Miesel, John Louis; Fitzpatrick, Gina Marie; Meyer, Kevin Gerald; Niyaz, Noormohamed Mohamed; Morrison, Irene Mae; Gajewski, Robert Peter
PATENT ASSIGNEE(S): Dow Agrosciences LLC, USA
SOURCE: PCT Int. Appl., 159 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001005769	A2	20010125	WO 2000-US19794	20000720
WO 2001005769	A3	20011122		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1196388	A2	20020417	EP 2000-950470	20000720
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JP 2003528806	T2	20030930	JP 2001-511430	20000720
BR 2000012615	A	20040330	BR 2000-12615	20000720
US 6355660 - AO	B1	20020312	US 2000-632930	20000804
US 2002177578 - AO	A1	20021128	US 2001-22413	20011213
US 2003018052	A1	20030123	US 2001-22207	20011213
US 2003018012 - AO	A1	20030123	US 2001-22511	20011213
US 6706740	B2	20040316		
US 2003022902 - AO	A1	20030130	US 2001-22483	20011213
US 2003022903 AO	A1	20030130	US 2001-23497	20011213
US 2004034025 AO	A1	20040219	US 2002-307844	20021202
US 2004048864 AO	A1	20040311	US 2002-307710	20021202

PRIORITY APPLN. INFO.:

US 1999-144676P	P	19990720
US 1999-149977P	P	19990820
US 1999-150248P	P	19990823
US 2000-620662	A3	20000720
WO 2000-US19794	W	20000720
US 2000-632930	A3	20000804

OTHER SOURCE(S): MARPAT 134:131431
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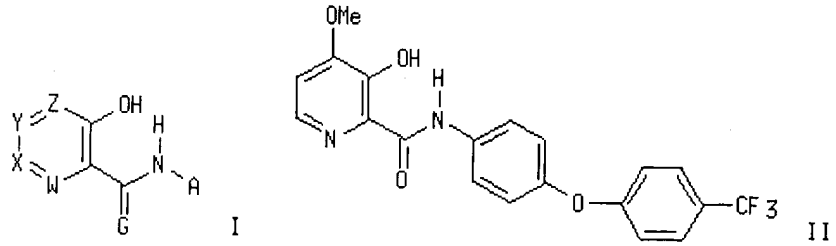


I II

AB Title compds. I [W, X, Y, Z are selected from S, O, NR1, N, CR2 or bond and comprise a 5-6 membered (un)substituted heterocyclic ring; R1 = H, alkyl, alkenyl, alkynyl, OH, acyloxy, alkoxymethyl, CHF2, cyclopropyl, or alkoxy; R2 = H, halo, CN, OH, alkyl, haloalkyl, cyclopropyl, alkoxy, haloalkoxy, etc.; G = O, S or NOR3 where R3 = H or alkyl; A = (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, unsatd. cycloalkyl, heterocycle, bi or tricyclic ring system which may contain heteroatoms, aryl or heteroaryl, etc.] bearing a hydroxy group adjacent to the amide functionality are prepd. and disclosed as antifungal agents, particularly for plants. Thus, pyridinyl carboxamide II was prepd. via amidation of 3-benzyloxy-6-bromo-4-methoxypyridin-2-carbonyl chloride with 4-(4-trifluoromethylphenoxy)aniline with subsequent deprotection. The preferred fungicidal compn. consists of a compd. of formula I with a phytol. acceptable carrier. Activity has been demonstrated against a variety of fungi, e.g., Plasmopara viticola (Downy Mildew of Grape), Phytophthora infestans (Late Blight of Tomato), and Venturia inaequalis (Apple Scab). I is both useful for eradication and prevention of fungal attack.

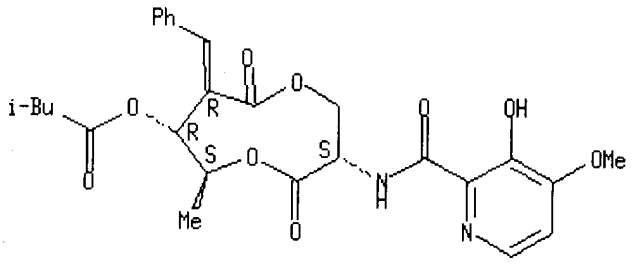
IT **167173-87-7P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and fungicidal activity of heterocyclic arom. amides)

RN 167173-87-7 HCAPLUS

CN Butanoic acid, 3-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

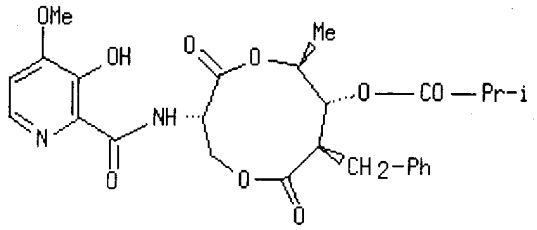


L18 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1999:313243 HCAPLUS
DOCUMENT NUMBER: 131:214101
TITLE: Total synthesis of the antifungal dilactone UK-2A and analogs and their bioactivities
AUTHOR(S): Kamei, Noriyuki; Shibata, Tetsuo; Inoguchi, Kiyoshi; Senda, Hisato; Ikari, Takashi; Itoh, Nobuko; Shimano, Masanao
CORPORATE SOURCE: Department of Medical Chemistry and Molecular Design,

Drug Discovery Research Laboratories, Kaken Pharmaceutical Co., Ltd., Japan
SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1998), 40th, 679-684
CODEN: TYKYDS
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
GI



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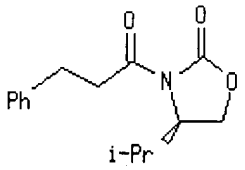

II

AB UK-2A (I) which has recently been isolated from the mycelial cake of Streptomyces sp. 517-02, possesses nine-membered dilactone and a picolinic acid moiety. The plane structure of UK-2A has been elucidated by 1H and 13C NMR analyses and chem. degrdn. studies, but the relative and abs. configurations of the four chiral centers in UK-2A still remain to be detd. UK-2A has strongly inhibited the growth of various kinds of yeasts and filamentous fungi, but its cytotoxic activities against several kinds of mammalian cells were very weak. The combination of its interesting mol. architecture and the potent antifungal activity prompted us to launch the total synthesis of UK-2A. The synthesis of UK-2A has been achieved through a 12-step sequence from II in 26% overall yield. The key strategy employed in this approach involves; (1) construction of the three consecutive chiral centers from C2 to C4 based upon the well-established Evans aldol reaction and (2) the nine-membered lactonization. The authors' synthetic route to UK-2A would permit a practical and reliable construction of UK-2A and a variety of its analogs. In order to define the selective cytotoxicities of UK-2A against yeasts and filamentous fungi, UK-2A and its analogs synthesized were subjected to the MIC evaluation and cytotoxic activity examn. compared with the ref. compds., amphotericin B and fluconazole. UK-2A has a broad antifungal spectrum, while its cytotoxicities was considerably weak compared to other substrates. The results of the UK-2A analogs suggested that the basicity of the picolinic acid moiety in UK-2A was essential for the antifungal activities and that the feature of the nine-membered dilactone contributed to the selective cytotoxicities.

IT **167173-85-5P**, Antibiotic UK 2A
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(total synthesis of antifungal dilactone UK-2A and analogs and bioactivities)
RN 167173-85-5 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-

L19 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1999:511149 HCAPLUS
DOCUMENT NUMBER: 131:129825
TITLE: Novel antifungal compounds and process for producing the same
INVENTOR(S): Sakanaka, Osamu; Teraoka, Takeshi; Mitomo, Koichi; Tamura, Takayoshi; Murai, Yasushi; Iinuma, Katsuharu; Kuzuhara, Kikuko; Mikoshiba, Haruki; Taniguchi, Makoto
PATENT ASSIGNEE(S): Meiji Seika Kaisha, Ltd., Japan
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9940081	A1	19990812	WO 1999-JP541	19990208
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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AU 9924398	A1	19990823	AU 1999-24398	19990208
AU 751098	B2	20020808		
EP 1054011	A1	20001122	EP 1999-903901	19990208
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
NZ 506249	A	20030429	NZ 1999-506249	19990208

PRIORITY APPLN. INFO.: JP 1998-26257 A 19980206
WO 1999-JP541 W 19990208

OTHER SOURCE(S): MARPAT 131:129825
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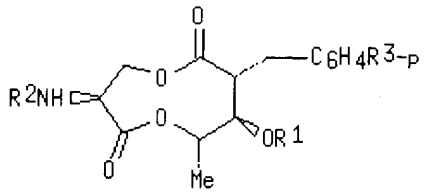


I

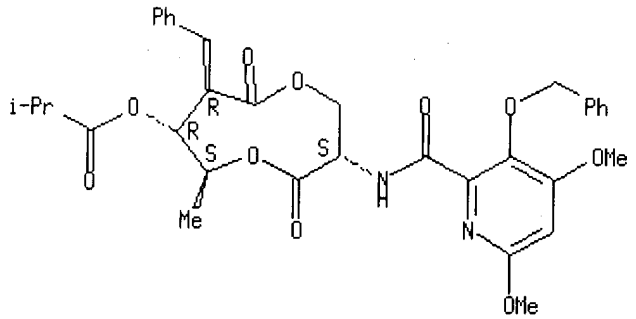
AB The title compds. [I; R1 = iso-Bu, tigloyl, isovaleryl, 2-methylbutanoyl; R2 = H, arom. acyl, protecting group such substituted benzoyl, substituted nicotinoyl; R3 = H, nitro, amino, acylamino, N,N-dialkylamino; with provisos] are prepd. Thus, UK-2A in CH2Cl2 contg. pyridine and PCl5 was refluxed for 1.5 h, the reaction mixt. was allowed to cool and then reacted with methanol for 15 h to give (2R,3R,4S,7S)-7-amino-2-benzyl-5,9-dioxa-3-isobutyryloxy-4-methyl-1,6-cyclononanedione. In an antifungal

test, (2R,3R,4S,7S)-7-(2-hydroxynicotinylamino)-2-benzyl-5,9-dioxa-3-isobutyryl-4-methyl-1,6-cyclononanedione (also prepd.) at 0.05 μg showed potency almost double that of UK-2A against Saccharomyces cerevisiae.

IT 234112-85-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); RCT (Reactant); **THU (Therapeutic use)**; **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of UK-2A derivs. as antifungals)

RN 234112-85-7 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[[4,6-dimethoxy-3-(phenylmethoxy)-2-pyridinyl]carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1999:368241 HCAPLUS
DOCUMENT NUMBER: 131:125082
TITLE: UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02: IV. Comparative studies of UK-2A with antimycin A3 on cytotoxic activity and reactive oxygen species generation in LLC-PK1 cells
AUTHOR(S): Takimoto, Hiroaki; Machida, Kiyotaka; Ueki, Masashi; Tanaka, Toshio; Taniguchi, Makoto
CORPORATE SOURCE: Department of Biology, Graduate School of Science, Osaka City University, Osaka, 558-8585, Japan
SOURCE: Journal of Antibiotics (1999), 52(5), 480-484
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB UK-2A, a novel antifungal antibiotic, is a structural relative of antimycin A3 (AA) and its mode of action is similar to that of AA which inhibits mitochondrial electron transport at complex III. In spite of their structural resemblance, AA had strong cytotoxicity while UK-2A had little cytotoxicity against LLC-PK1 cells as well as other types of cultured cells. When cells were treated with UK-2A or with AA the intracellular ATP content decreased significantly within 5 min in glucose-free medium to almost the same extent in both cases. Moreover, under the same conditions, UK-2A killed cells at a similar rate to AA. This suggested that UK-2A entered into the cells and, like AA, inhibited

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  more information.

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L20           0 S L19 AND FUNGAL?
L21           0 S L19 AND PYRICULAR?

     FILE 'CAOLD' ENTERED AT 11:01:43 ON 06 JUL 2004

=> s l3
L22           0 L3

=>
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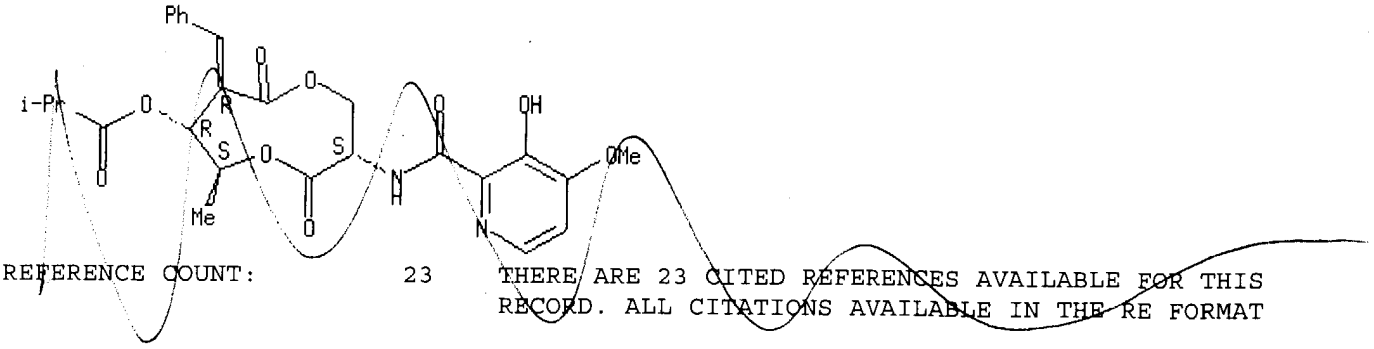


REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1998:22846 HCAPLUS
DOCUMENT NUMBER: 128:163891
TITLE: The mode of action of UK-2A and UK-3A, novel antifungal antibiotics from Streptomyces sp. 517-02
AUTHOR(S): Ueki, Masashi; **Taniguchi, Makoto**
CORPORATE SOURCE: Dep. Biology, Fac. Sci., Osaka City Univ., Osaka, 558, Japan
SOURCE: Journal of Antibiotics (1997), 50(12), 1052-1057
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English

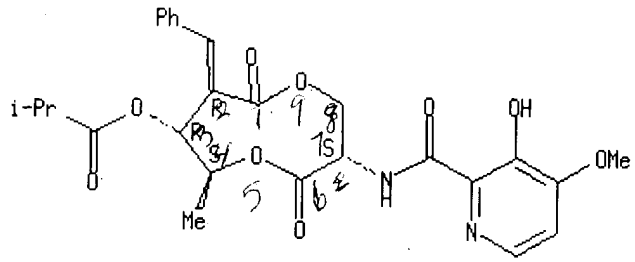
AB UK-2A and UK-3A are structural relatives of antimycins, which were isolated as antifungal antibiotics with little cytotoxicity that demonstrated inhibition of respiratory activity. They halve the cellular respiration of yeast within 4~5 min and the intracellular ATP content within 2~5 min. They inhibited the yeast mitochondrial respiration using β-hydroxybutyrate and succinate as a respiratory substrate, but no inhibition was obsd. using ascorbate-reduced tetra-Me p-phenylenediamine as the substrate. The site of respiratory inhibition of UK-2A and UK-3A was thought to be the cytochrome bc1 complex in the mitochondrial electron transport chain of yeast cells. They also inhibited the mitochondrial respiration of rat liver. Intact animal cells might have some system to defend themselves from the actions of UK-2A and UK-3A.

IT 167173-85-5, UK-2A
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(mechanism of antifungal action of UK-2A and UK-3A)

RN 167173-85-5 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

102(b)

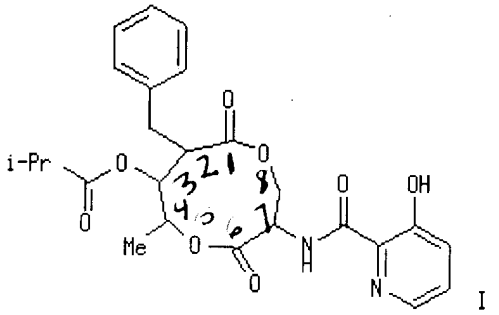


REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1997:504110 HCAPLUS
DOCUMENT NUMBER: 127:217524
TITLE: UK-3A, a novel antifungal antibiotic from Streptomyces sp. 517-02: fermentation, isolation, structural elucidation and biological properties
AUTHOR(S): Ueki, Masashi; Kusumoto, Atsushi; Hanafi, Muhammad; Shibata, Kozo; Tanaka, Toshio; **Taniguchi, Makoto**
CORPORATE SOURCE: Faculty of Science, Osaka City University, Osaka, 558, Japan
SOURCE: Journal of Antibiotics (1997), 50(7), 551-555
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

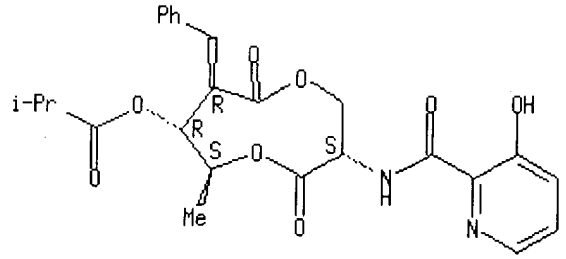
Only 1 species

AB A novel antifungal antibiotic, UK-3A (I), was obtained from the mycelial cake of Streptomyces sp. 517-02. I was very similar in structure to UK-2A, a structural relative of antimycin A. The antifungal spectrum of I was relatively broad (MICs for yeasts and filamentous fungi: 1.56~6.25 and 0.39~1.56 μg/mL, resp.). The cytotoxic activity of I was weak (IC50: 18~100 μg/mL).

IT **194931-82-3P**, Antibiotic UK 3A
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(UK-3A is a novel antifungal antibiotic from Streptomyces)

RN 194931-82-3 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



102(b)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1997:16443 HCAPLUS
DOCUMENT NUMBER: 126:144017
TITLE: UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02. II. Structural elucidation
AUTHOR(S): Hanafi, Muhammad; Shibata, Kozo; Ueki, Masashi; **Taniguchi, Makoto**
CORPORATE SOURCE: Fac. Sci., Osaka City Univ., Osaka, 558, Japan
SOURCE: Journal of Antibiotics (1996), 49(12), 1226-1231
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English

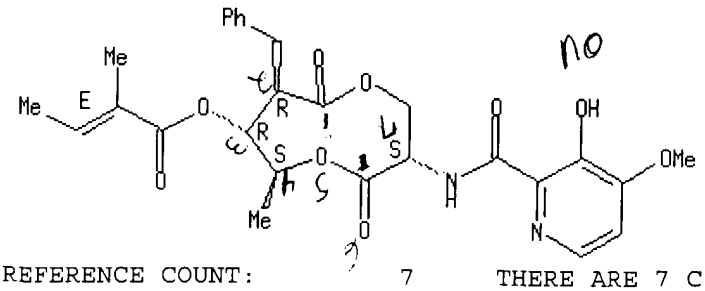
AB UK-2A, UK-2B, UK-2C and UK-2D, novel antibiotics produced by Streptomyces sp. 517-02, exhibit strong antifungal activity. The structures were elucidated based on spectral and chem. evidence that these compds. are the derivs. of the nine-membered dilactone formed from serine and 4-hydroxypentanoic acid moiety.

IT **167173-86-6P**
RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation) (structural elucidation of UK-2A, UK-2B, UK-2C and UK-2D, novel antifungal antibiotics from Streptomyces sp. 517-02)

RN 167173-86-6 HCAPLUS
CN 2-Butenoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.

more 102(b) species



no

102(b) Same as 128:163891

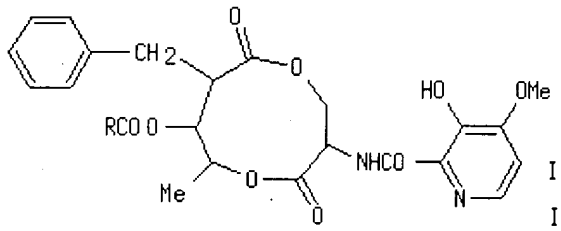
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1996:463922 HCAPLUS

DOCUMENT NUMBER: 125:109869
TITLE: UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02. I. Fermentation, isolation, and biological properties
AUTHOR(S): Ueki, Masahi; Abe, Keiichi; Hanafi, Muhammad; Shibata, Kozo; Tanaka, Toshio; **Taniguchi, Makoto**
CORPORATE SOURCE: Fac. Science, Osaka City Univ., Osaka, 558, Japan
SOURCE: Journal of Antibiotics (1996), 49(7), 639-643
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



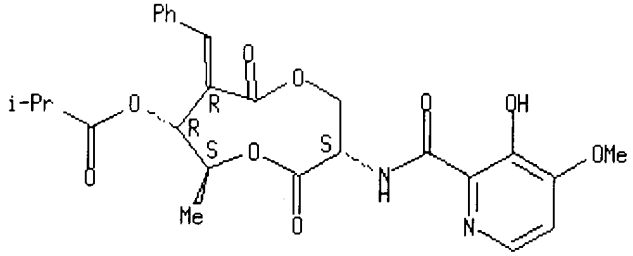
I R = CHMe 2
II R = CH(Me)=CHMe

AB Novel antifungal antibiotics, UK-2A (I), UK-2B (II) and a mixt. of UK-2C and UK-2D, were obtained from the mycelial cake of Streptomyces sp. 517-02. All of the UK-2 compds. were similar in structure to antimycin A. The antifungal activities of of UK-2 compds. were as strong as that of antimycin A. However, the UK-2 compds. demonstrated weak cytotoxicity compared to antimycin A.

IT **167173-85-5**, UK 2A
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02. I. Fermn., isolation, and biol. properties)

RN 167173-85-5 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



102(b)

L17 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1995:934118 HCAPLUS
DOCUMENT NUMBER: 123:337552
TITLE: Fungicides manufacture with Streptoverticillium
INVENTOR(S): **Taniguchi, Makoto**; Shibata, Kozo; Abe, Keiichi; Kodama, Tooru; Uotani, Kazumichi; Oonishi, Yoshitaka

PATENT ASSIGNEE(S): Suntory Ltd., Japan; Meiji Seika Co.; Meiji Seika Kaisha, Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07233165	A2	19950905	JP 1994-26884	19940224
JP 3526602	B2	20040517		

PRIORITY APPLN. INFO.: JP 1994-26884 19940224
OTHER SOURCE(S): MARPAT 123:337552
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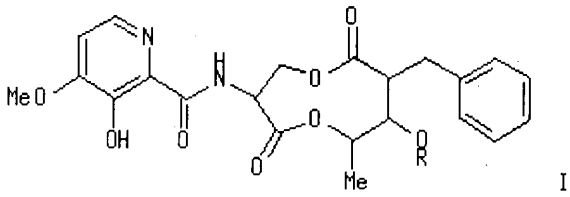


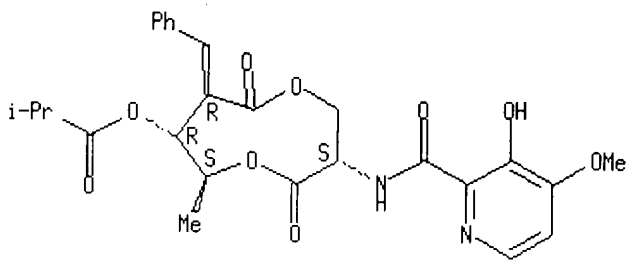
I

AB Fungicides (I: R = linear or branched aliph. (un)satd. acyl group) are manufd. by culturing Streptoverticillium sp. SAM2084. Shake-culture of Streptoverticillium sp. SAM2084 for manuf. of four I wherein R = 2-methylpropanoyl (UK-2A), trans-2-methyl-2-butenoyl (UK-2B), 3-methylbutanoyl (UK-2C), and 2-methylbutanoyl (UK-2D) was shown. Also given were the physiol. and morphol. characteristics of the Streptoverticillium sp. SAM2084.

IT **167173-85-5P**, UK 2A
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(fungicides manuf. with Streptoverticillium)

RN 167173-85-5 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



102(b)

=> d his

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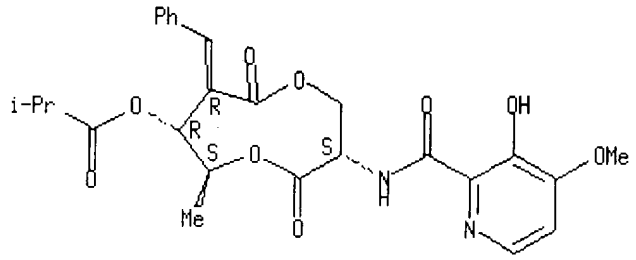
FILE 'REGISTRY' ENTERED AT 10:40:49 ON 06 JUL 2004

pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

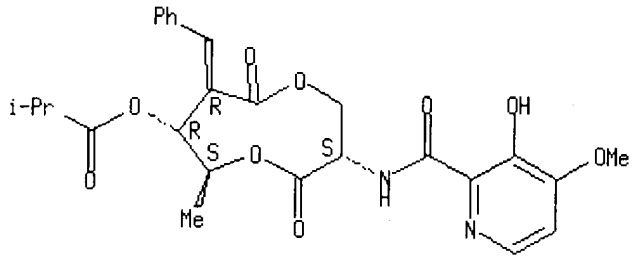
ACCESSION NUMBER: 1995:671786 HCAPLUS
DOCUMENT NUMBER: 123:164736
TITLE: The structures of UK-1 and UK-2, novel antibiotics from Streptomyces sp. 517-02
AUTHOR(S): Hanafi, O Muhammad; Kozo, Shibata; Masaru, Kashiwada; Masashi, Ueki; Makoto, Taniguchi
CORPORATE SOURCE: Faculty Science, Osaka City University, Japan
SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1994), 36th, 728-35
CODEN: TYKYDS
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB The mycelial cake was extd. with acetone, and filtered. The filtrate was concd. to give aq. soln., which was extd. with chloroform. Org. layer was concd. to yield an oily material, followed by purifn. on silica gel column chromatog. to give crude UK-1 and UK-2. Finally, the recrystn. of each fractions from MeOH, afforded UK-1 and UK-2. UK-1 (I), a novel metabolite, demonstrated potent cytotoxic activity against B16, Hela and P388 cells, and UK-2, novel complex of antibiotics, exhibited strong antifungal activity. Methylation of UK-1 by CH3I and anhyd. K2CO3 in dry acetone gave monomethyl ether deriv., Me-UK-1. Alk. hydrolysis of UK-1 afforded carboxylic acid deriv., DeMe-UK-1. Partial structures, A, B, and C were elucidated by COSY, and COLOC expts. Based on these results, the structure of UK-1 was deduced to be a novel benzoxazole dimer deriv. UK-2, novel metabolite contg. complex of antibiotics with strong antifungal activity, was purified by reverse phase HPLC, to give UK-2A, B, C and D. From NMR and mass spectral data, the structures of UK-2A, B, C and D were established as isobutyrate, tiglate, isovalerate, and 2-methylbutyrate of nine membered dilactone skeleton, resp. Based on the result of synthesis of hydrolysis products, the abs. configuration of UK-2 was identified.

IT **167173-85-5**, Antibiotic UK 2A
RL: PRP (Properties)
(structures of UK-1 and UK-2, novel antibiotics from Streptomyces sp. 517-02)

RN 167173-85-5 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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     (FILE 'HOME' ENTERED AT 10:40:39 ON 06 JUL 2004)

     FILE 'REGISTRY' ENTERED AT 10:40:49 ON 06 JUL 2004
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L2             16 S L1
L3            319 S L1 FULL

     FILE 'HCAPLUS' ENTERED AT 10:53:02 ON 06 JUL 2004
L4             22 S L3

     FILE 'REGISTRY' ENTERED AT 10:53:06 ON 06 JUL 2004
L5                STRUCTURE UPLOADED
L6              0 S L5
L7              0 S L5 FULL

     FILE 'HCAPLUS' ENTERED AT 10:56:36 ON 06 JUL 2004
L8              3 S L4 AND SAKANAKA, O?/AU
L9             19 S L4 NOT L8
L10             0 S L9 AND MITOMO, K?/AU
L11             0 S L9 AND TAMURA, T?/AU
L12             0 S L9 AND MURAI, Y?/AU
L13             0 S L9 AND IINUMA, K?/AU
L14             0 S L9 AND TERAOKA, T?/AU
L15             0 S L9 AND KUZUHARA, K?/AU
L16             0 S L9 AND MIKOSHIBA, H?/AU
L17            10 S L9 AND TANIGUCHI, M?/AU
L18             9 S L9 NOT L17

=> s l3/thu
            22 L3
        603555 THU/RL
L19          3 L3/THU
                 (L3 (L) THU/RL)

=> s l19 and fungal?
         42130 FUNGAL?
L20          0 L19 AND FUNGAL?

=> s l19 and pyricular?
          1717 PYRICULAR?
L21          0 L19 AND PYRICULAR?

=> d l19, ibib abs fhitstr, 1-3
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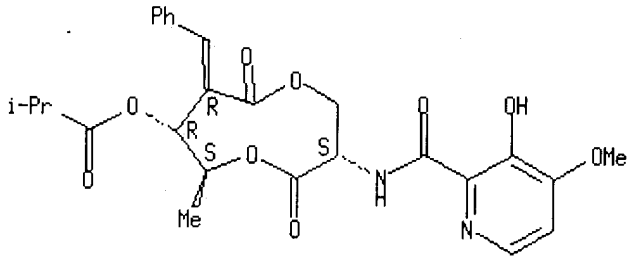
mitochondrial electron transport. On the other hand, AA stimulated reactive oxygen species (ROS) prodn. within 5 min even at a low concn. of 1 μM whereas UK-2A did not show such an effect. The difference in the ROS-producing abilities of UK-2A and AA may account for the different cytotoxic effects of the two compds.

IT **167173-85-5**, UK-2A
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(comparative studies of UK-2A with antimycin A3 on cytotoxic activity and reactive oxygen species generation in LLC-PK1 cells)

RN 167173-85-5 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1995:934118 HCAPLUS
DOCUMENT NUMBER: 123:337552
TITLE: Fungicides manufacture with Streptoverticillium
INVENTOR(S): Taniguchi, Makoto; Shibata, Kozo; Abe, Keiichi; Kodama, Tooru; Uotani, Kazumichi; Oonishi, Yoshitaka
PATENT ASSIGNEE(S): Suntory Ltd., Japan; Meiji Seika Co.; Meiji Seika Kaisha, Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07233165	A2	19950905	JP 1994-26884	19940224
JP 3526602	B2	20040517		

PRIORITY APPLN. INFO.: JP 1994-26884 19940224
OTHER SOURCE(S): MARPAT 123:337552
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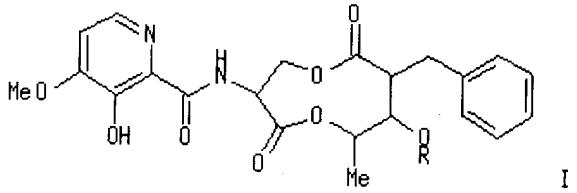


I

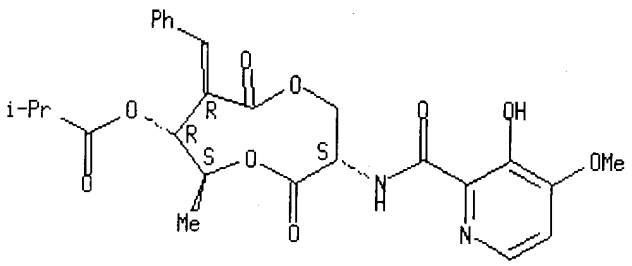
AB Fungicides (I: R = linear or branched aliph. (un)satd. acyl group) are manufd. by culturing Streptoverticillium sp. SAM2084. Shake-culture of Streptoverticillium sp. SAM2084 for manuf. of four I wherein R = 2-methylpropanoyl (UK-2A), trans-2-methyl-2-butenoyl (UK-2B), 3-methylbutanoyl (UK-2C), and 2-methylbutanoyl (UK-2D) was shown. Also given were the physiol. and morphol. characteristics of the Streptoverticillium sp. SAM2084.

IT **167173-85-5P**, UK 2A
RL: BPN (Biosynthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(fungicides manuf. with Streptoverticillium)

RN 167173-85-5 HCAPLUS

CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



=> file caold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	147.23	470.84
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-18.38	-18.38

FILE 'CAOLD' ENTERED AT 11:01:43 ON 06 JUL 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

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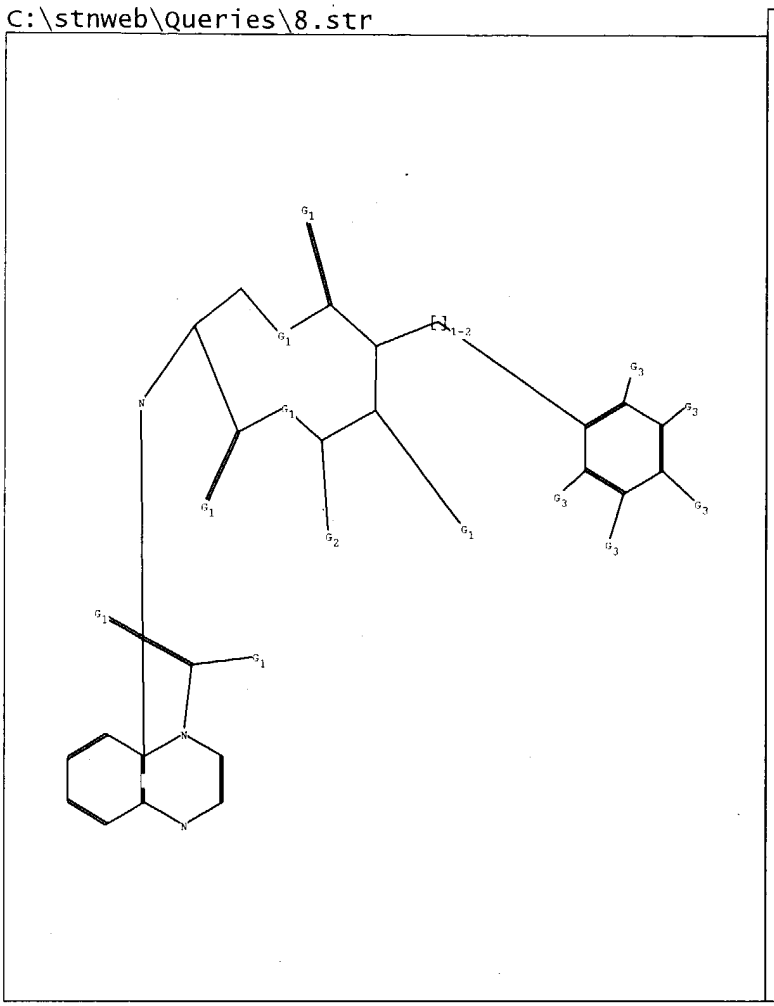

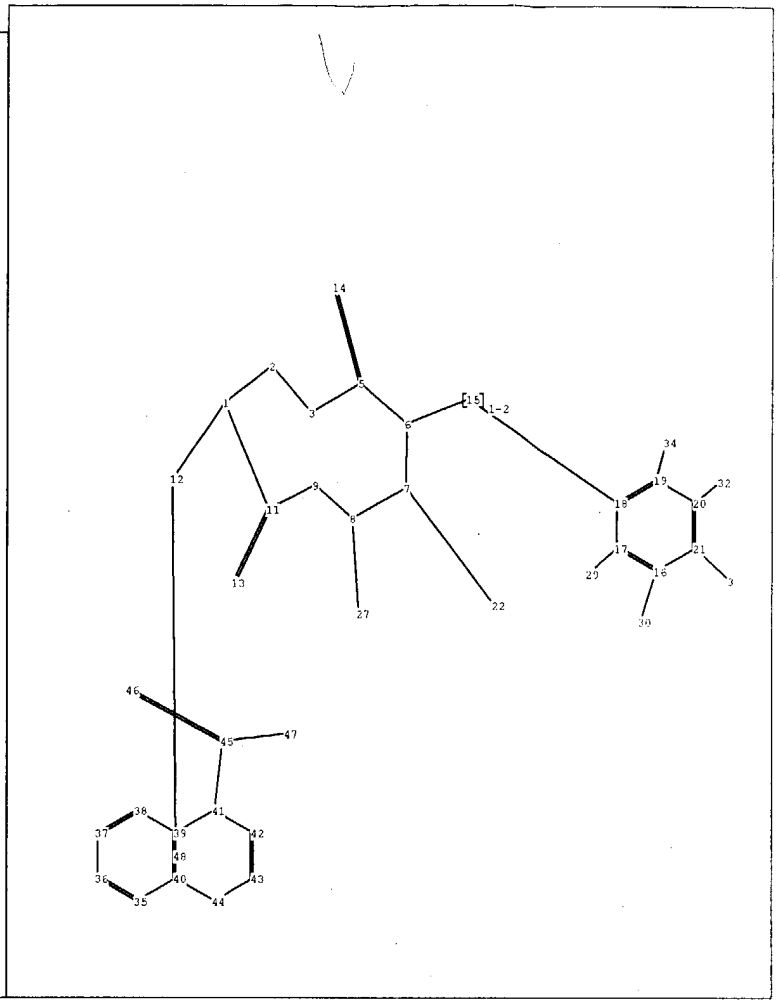

chain nodes :
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ring nodes :
1 2 3 5 6 7 8 9 11 16 17 18 19 20 21 35 36 37 38 39 40 41 42 43 44
chain bonds :
1-12 5-14 6-15 7-22 8-27 11-13 15-18 16-30 17-29 19-34 20-32 21-31 41-45 45-46 45-47
ring bonds :
1-2 1-11 2-3 3-5 5-6 6-7 7-8 8-9 9-11 16-17 16-21 17-18 18-19 19-20 20-21 35-36 35-40 36-37 37-38 38-39 39-40 39-41 40-44 41-42 42-43 43-44
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1-2 1-11 1-12 2-3 3-5 5-6 5-14 6-7 6-15 7-8 7-22 8-9 8-27 9-11 11-13 15-18 16-30 17-29 19-34 20-32 21-31 39-41 40-44 41-42 41-45 42-43 43-44 45-46 45-47
normalized bonds :
16-17 16-21 17-18 18-19 19-20 20-21 35-36 35-40 36-37 37-38 38-39 39-40
isolated ring systems :
containing 1 : 16 : 35 :

G1:O,S

G2:CH3,Et,H

G3:H,CH3

Match level :
1:Atom 2:Atom 3:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS 11:Atom 12:CLASS 13:Atom 14:Atom 15:CLASS 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 27:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 34:CLASS 35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:Atom 42:Atom 43:Atom 44:Atom 45:CLASS 46:Atom 47:Atom 48:CLASS